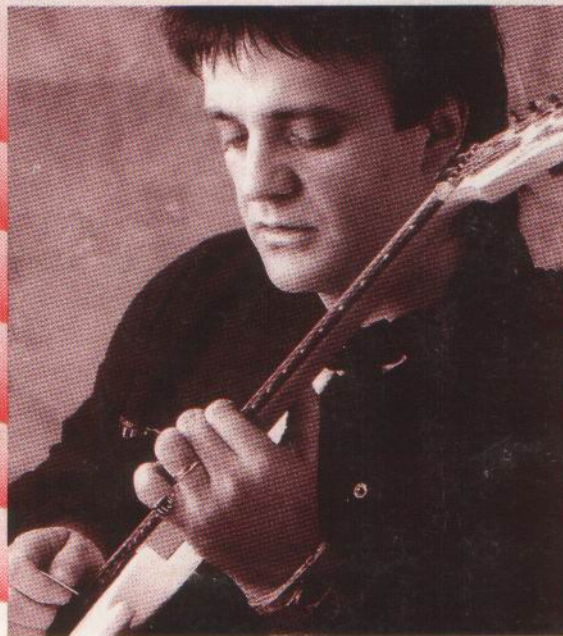


THE FRANK GAMBALE TECHNIQUE BOOK I



FRANK GAMBALE

THE ESSENTIAL SOLOING THEORY COURSE
FOR ALL GUITARISTS!



BOOK ONE

MANHATTAN
Music
PUBLICATIONS



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SOLOING CONCEPT

I break music down into six basic chord types, and their applicable scales (See Fig. 1). Then over each of the chord types I apply five soloing approaches for each applicable scale. The possibilities for soloing over these chords are, therefore, greatly expanded.

This book covers the second and third approaches for chord type 4 and all approaches for chord types 5 and 6.

CHORD TYPES (and applicable scales)	APPROACHES
1 MINOR 7 1a Dorian 1b Aeolian	1 SCALE* (7 or 8 notes)
2 MAJOR 7 2a Major 2b Lydian	2 PENTATONICS & BLUES (5 & 6 notes)
3 UNALTERED DOMINANT 7 3a Mixolydian 3b Lydian b7	3 ARPEGGIOS (4 notes)
4 ALTERED DOMINANT 7 4a Super Locrian 4b Diminished 1/2 / whole 4c Phrygian major	4 TRIADS (3 notes)
5 MINOR 7 (b5) 5a Locrian 5b Aeolian b5 5c Locrian nat6	5 INTERVALS (2 notes)
6 DIMINISHED 6a Diminished whole / 1/2 6b Super Locrian nat6	
	<hr/>
	* Approaches 2 through 5 are derived from the applicable scale chosen for soloing approach 1.

Fig. 1

CHAPTER I: MINOR 7 CHORDS

There are two main ways to treat a min7 chord:

As a II chord in a major key, or as a VI chord.

1a Min7 as a II chord: the chord = 1 b3 5 b7 (9 11 13);
the scale to use is Dorian mode = 1 2 b3 4 5 6 b7 =
mode II of major. (9) (11) (13)
(see appendix if you need an explanation of modes.)

1b Min7 as a VI chord: the chord = 1 b3 5 b7 (9 11 b13);
the scale is Aeolian mode (also known as natural minor)
= 1 2 b3 4 5 b6 b7 = mode VI of major
(9) (11) (b13)

Example: Dmin7 can be a II in C major

Cmaj7 I	Dmin7 II	Emin7 III	Fmaj7 IV	G7 V	Amin7 VI	Bmin7 (b5) VII
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or a VI in F Major.

Fmaj7 I	Gmin7 II	Amin7 III	Bbmaj7 IV	C7 V	Dmin7 VI	Emin7 (b5) VII
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Compare these two scale approaches and you can see that the chords differ by only one note: nat13 over min7 (Dorian) versus b13 over min7 (Aeolian). The modes differ by one note: nat6 in Dorian versus b6 in Aeolian. Of course, 6 = the same note as 13; b6 = the same note as b13 or #5. So the pentatonics, arpeggios etc., that we use over Dmin7 which contain a B (6 or 13 of D) will be specifically Dorian. Those which contain a Bb (b6 or #5 or b13 of D) will be specifically Aeolian. And there are some which contain neither a 6 nor a b6; these are common to both Dorian and Aeolian.

First, we'll take a look at the Dorian scale over min7.

CHORD TYPE: Min7

APPROACH: DORIAN SCALE

Min7 chord as a II in major: use Dorian mode = mode II of major = 1 2 b3 4 5 6 b7

EXAMPLE:

Dmin7: use D Dorian = mode II of C major = D E F G A B C.

D Dorian needs to be learned in the following manner all over the neck:

Ex. 1: D DORIAN



Knowing the intervals that are being played is very important; knowing where the 5 of D is, where the b7 of D is etc. Remember, Dorian means 1 2 b3 4 5 6 b7 from any root.

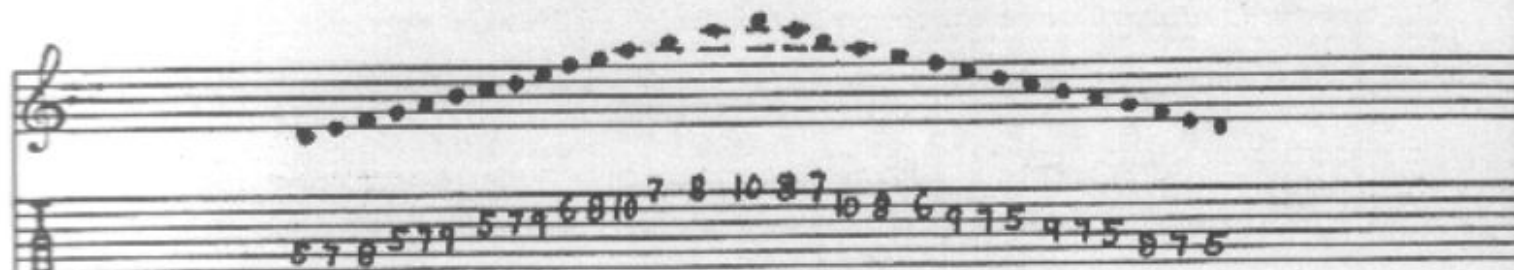
Learn Dorian in other keys as well.

EXAMPLE:

Amin7; use A Dorian = mode II of G major = 1 2 b3 4 5 6 b7 from A = A B C D E F# G.

Now, let's see what the other approaches offer us, given the choice of the Dorian mode.

Ex. 2 D Dorian over Dmin7.



CHORD TYPE: Min7

APPROACH: Dorian Pentatonics/Blues

The second approach is pentatonics/blues. To see which ones are available, we need to look at the harmonized scale of Cmaj (since our example, Dmin7, is being treated as a II in C).

Cmaj7	Dmin7	Emin7	Fmaj7	G7	Amin7	Bmin7(b5)
I	II	III	IV	V	VI	VII

Minor pentatonics (1 b3 4 5 b7) and minor blues (1 b3 4 b5 nat5 b7) can be extracted from the minor 7 chords (II III and VI) of any major scale. Therefore, we have Dmin, Emin, and Amin pent/blues which can all be played over Dmin7 since they are all related through the harmonized scale. Emin pent/blues is specifically Dorian because it contains a B (6 of D).

Now, as far as pentatonics and blues go, Dmin pentatonics and Dmin blues played over Dmin7 are okay, but sound a little too ordinary. Combining the other two pentatonics or blues (Emin and Amin) with Dmin pent/blues creates a fresher sound.

FORMULA: To transpose this to other keys: min pent/blues from root, [up] whole step or [up] 5th from the chord root.

Let's Listen.

Ex. 3 Dmin pentatonic over Dmin7

Ex. 3 shows a Dmin pentatonic scale over a Dmin7 chord. The melody is written in a treble clef with a key signature of one flat (Bb). The bass line is written in a bass clef. The scale is played in eighth notes, starting on D4 and ending on D3. The final measure shows a whole note D3.

Ex. 4 Emin pentatonic over Dmin7

Ex. 4 shows an Emin pentatonic scale over a Dmin7 chord. The melody is written in a treble clef with a key signature of one flat (Bb). The bass line is written in a bass clef. The scale is played in eighth notes, starting on D4 and ending on D3. The final measure shows a whole note D3.

Ex. 5 Amin pentatonic over Dmin7

Ex. 5 shows an Amin pentatonic scale over a Dmin7 chord. The melody is written in a treble clef with a key signature of one flat (Bb). The bass line is written in a bass clef. The scale is played in eighth notes, starting on D4 and ending on D3. The final measure shows a whole note D3.

Combining all three min pentatonics (Dmin, Emin, Amin) over Dmin7.

Ex. 6

Ex. 6 displays three min pentatonics (D, E, and A) over a Dmin7 chord, written in standard musical notation with fingerings and fret numbers.

D Min Pent.

Staff 1 (Treble Clef): D4 (fing. 3), E4 (fing. 3), F#4 (fing. 3), G4 (fing. 3), A4 (fing. 3), B4 (fing. 3), C#5 (fing. 3), D5 (fing. 3).

Staff 2 (Bass Clef): D3 (fing. 8), E3 (fing. 5), F#3 (fing. 8), G3 (fing. 6), A3 (fing. 7), B3 (fing. 5), C#4 (fing. 7), D4 (fing. 5).

E Min Pent.

Staff 1 (Treble Clef): E4 (fing. 3), F#4 (fing. 3), G4 (fing. 3), A4 (fing. 3), B4 (fing. 3), C#5 (fing. 3), D5 (fing. 3), E5 (fing. 3).

Staff 2 (Bass Clef): E3 (fing. 7), F#3 (fing. 6), G3 (fing. 7), A3 (fing. 4), B3 (fing. 7), C#4 (fing. 4), D4 (fing. 7), E4 (fing. 8), F#4 (fing. 10), G4 (fing. 12).

A Min Pent.

Staff 1 (Treble Clef): A4 (fing. 3), B4 (fing. 3), C#5 (fing. 3), D5 (fing. 3), E5 (fing. 3), F#5 (fing. 3), G5 (fing. 3), A5 (fing. 3).

Staff 2 (Bass Clef): A2 (fing. 12), B2 (fing. 10), C#3 (fing. 8), D3 (fing. 10), E3 (fing. 8), F#3 (fing. 9), G3 (fing. 10), A3 (fing. 8), B3 (fing. 9), C#4 (fing. 7), D4 (fing. 5), E4 (fing. 7), F#4 (fing. 7), A4 (fing. 7).

The following examples are written out with the intervals as they affect the Dmin7.

Example: Emin pent = 1 b3 4 5 b7 from E = E G A B D = 2 4 5 6 1 of D Dorian.

Also, writing out the whole neck frees you up to select any fingering or position for these ideas.

Ex. 7 D Min Pent

	b3				b7 b3
			5		
3	4	b7 b3		①	4
5	5	①	4	b7	5
				b3	
7			5	①	
	b7 b3			4	b7
9					
	①	4	b7 b3	5	①
12		5	①	4	
	b3				b7 b3
			5		
15	4	b7 b3		①	4
17	5	①	4	b7	5
				b3	

Ex. 8 E Min Pent

		6	2	5	
3	4			①	4
			6		
5	5	①	4		2 5
7	6	2	5	①	6
				4	
9			6	2	
	①	4			5 ①
12	2	5	①	4	6 2
		6	2	5	
15	4			①	4
17	5	①	4		2 5

Ex. 9 A Min Pent

				b7	
			2	5	
3	4	b7		①	4
5	5	①	4	b7	2 5
7		2	5	①	
	b7			4	b7
9				2	
	①	4	b7		5 ①
12	2	5	①	4	2
				b7	
			2	5	
15	4	b7		①	4
17	5	①	4	b7	2 5

CHORD TYPE: Min 7
APPROACH: Dorian Arpeggios

The next approach is arpeggios.

Example: Dmin7

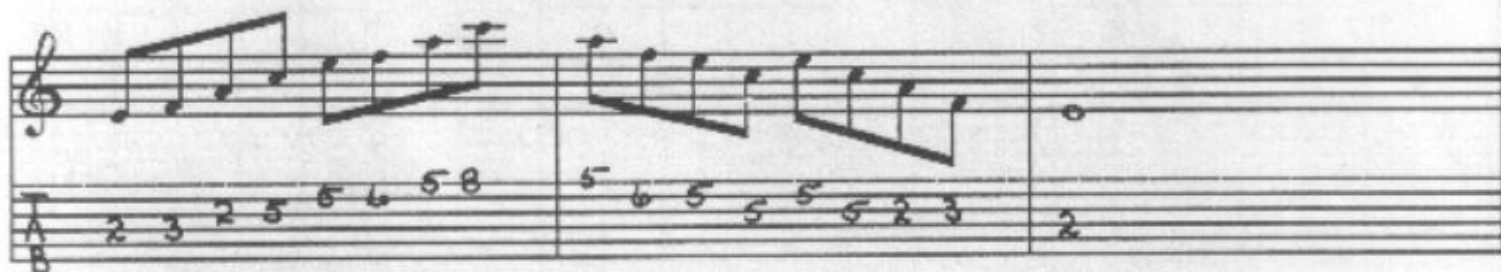
What is Dmin7? 1 b3 5 b7 from D = D F A C

I rarely play a Dmin7 arpeggio over Dmin7 because it sounds frightfully dull, chaps! But there is a remedy and it's quite simple, really. Let's extend the chord up to 9 and toss out the 1.

$\cancel{1} \text{ b3 } 5 \text{ b7 } 9 = \cancel{\text{D}} \text{ F A C E} = \text{Fmaj7}$

Now, if you play an Fmaj7 arp over a Dmin7 chord, you sound automatically like George Benson; it's much hipper. We're now playing $\text{b3 } 5 \text{ b7 } 9$ which is creating a Dmin9 sound without us bothering to play a D note. **FORMULA:** maj7 arp [up] b3.

Ex. 10 Fmaj7 arpeggio over Dmin7

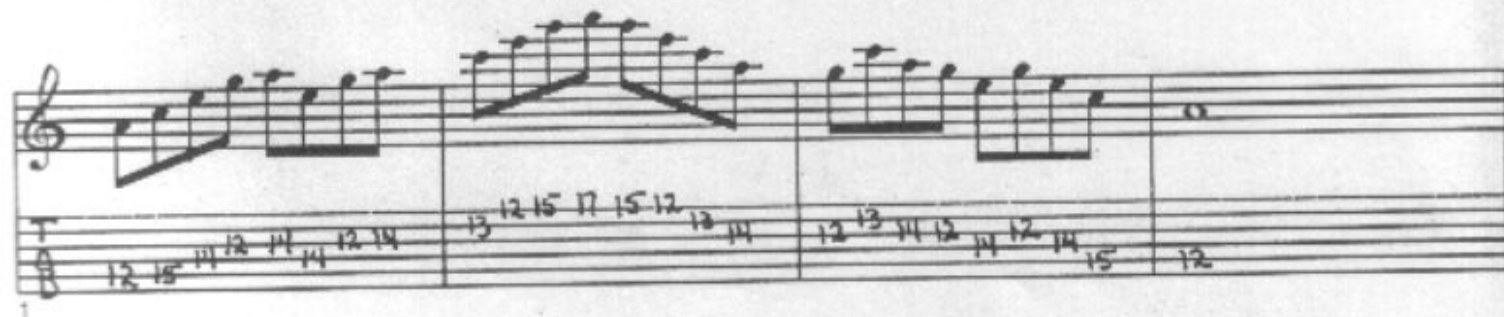


Okay, that was a good idea. Such a good idea, in fact, that we're going to do it again, except this time we'll extend to 11.

$\cancel{1} \text{ b3 } 5 \text{ b7 } 9 \text{ 11} = \cancel{\text{D}} \text{ F A C E G}$

This time we're left with A C E G which is Amin7; this arp sounds terrific over Dmin7. **FORMULA:** min7 arp [up] 5th. Let's listen.

Ex. 11 Amin7 arpeggio over Dmin7.



These are my first two choices for attacking a min7 chord with arpeggios.

Now let's look at the rest of the harmonized scale. ALL DIATONIC ARPEGGIOS SOUND GREAT over Dmin7. Let's listen to all of them.

Cmaj7 Dmin7 Emin7 Fmaj7 G7 Amin7 Bmin7(b5)

Ex. 12

Diatonic arpeggios from Cmaj over Dmin7 (cascading effect).

8Va

Loco

Cmaj7 Bmin7b5 Amin7 G7

Fmaj7 Emin7 Dmin7 Cmaj7

Here's a pattern for learning one-octave arps moving up or down in 4ths (this is a very musical way to practice them).

Ex. 13

Diatonic arpeggio's in 4ths over Dmin7 chord

Cmaj7 G7 Dmin7 Amin7 Bmin7b5 Emin7 Amin7 Dmin7

Emin7 Bmin7b5 Fmaj7 Cmaj7 Dmin7 G7 Cmaj7 Fmaj7

G7 Dmin7 Amin7 Emin7 Fmaj7 Bmin7b5 Emin7 Amin7

8Va

(Ex. 13 cont.)

Chord sequence: Bmin7b5, Fmaj7, Cmaj7, G7, Amin7, Dmin7, G7, Cmaj7.

Techniques: Loco, 8va.

CHORD TYPE: Min7

APPROACH: Dorian Triads

Now let's look at the triad approach.

ALL DIATONIC TRIADS from D Dorian (Cmajor) sound good over Dmin7. But the best effect comes from using the diatonic MAJOR triads. Major triads are found on I, IV and V in every major key. In C, that's C, F and G. **FORMULA:** maj triads [down] whole step, [up] min 3rd, [up] 4th. G triad over Dmin7 is specifically Dorian because it contains a B (6 of D). Let's listen to each of these triads over Dmin7.

Ex. 14 Cmaj, Fmaj and Gmaj triads over Dmin7.

Triads shown: C triad, F triad, G triad.

C triad (my favorite) = C E G = b7 9 11 of D.

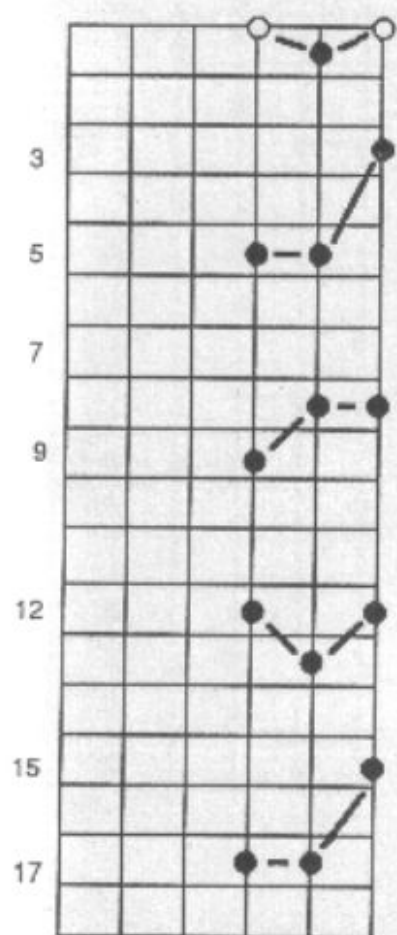
C triad gives you the upper extensions of a Dmin7 chord. Simply think of this formula: maj triad [down] whole step.

Fmaj triad = F A C = $b3$ 5 $b7$ of D. This triad is the same as Dmin7 without the D. This sounds okay; just re-defining the chord without saying anything new.

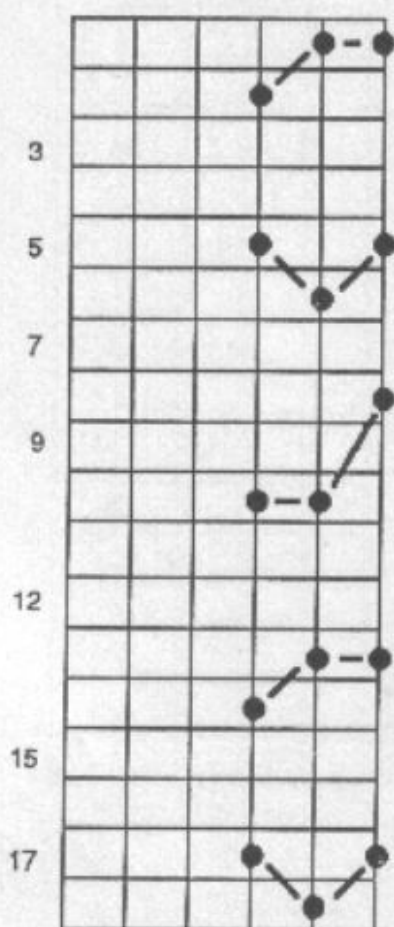
Gmaj triad = G B D = 11, 13, root of Dmin7. Of the major triads, this one is the least related to the chord. It has a very interesting sound, very suspended or unresolved. The trick to making these triads sound good is to mix them all up.

Learn triads on each group of three strings; G B E, D G B, A D G, E A D, horizontally down the neck in 1 4 5 motion. Let's listen.

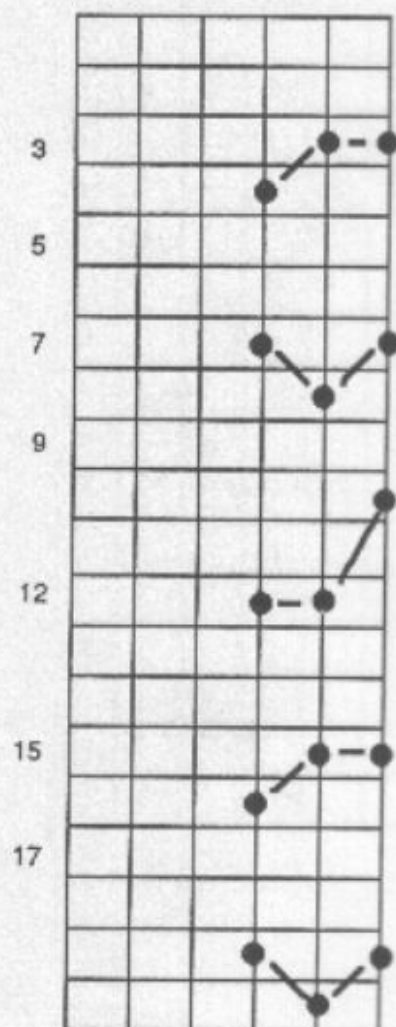
Ex. 15 C TRIADS



Ex. 16 F TRIADS

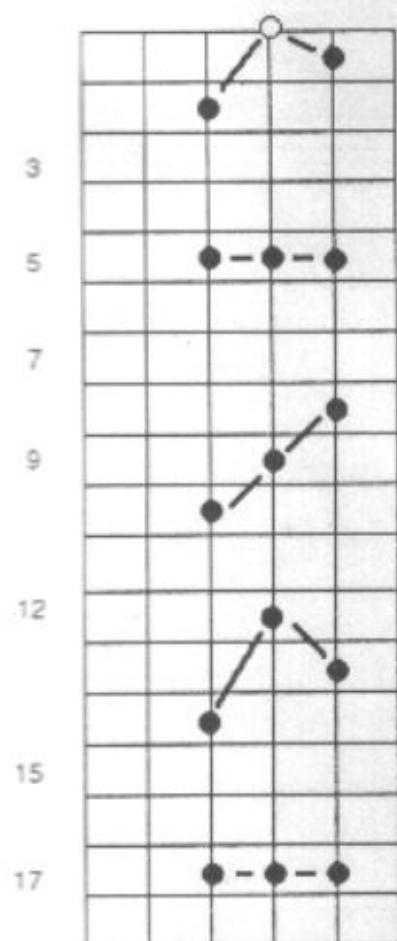


Ex. 17 G TRIADS

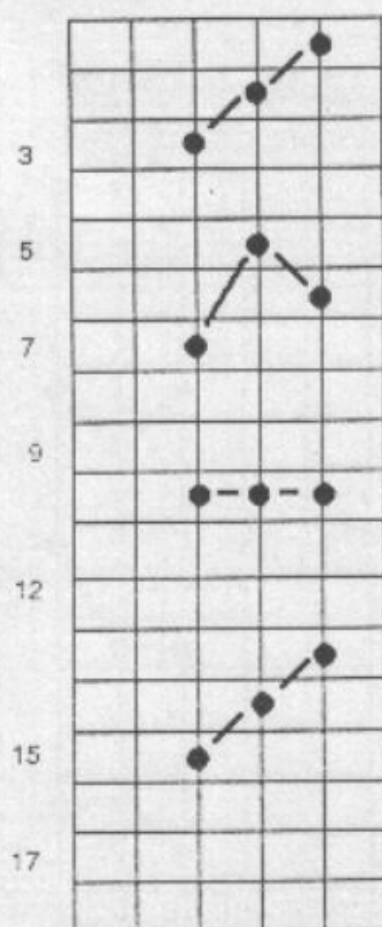


I, IV, V Triads from Cmaj on D G & B strings.

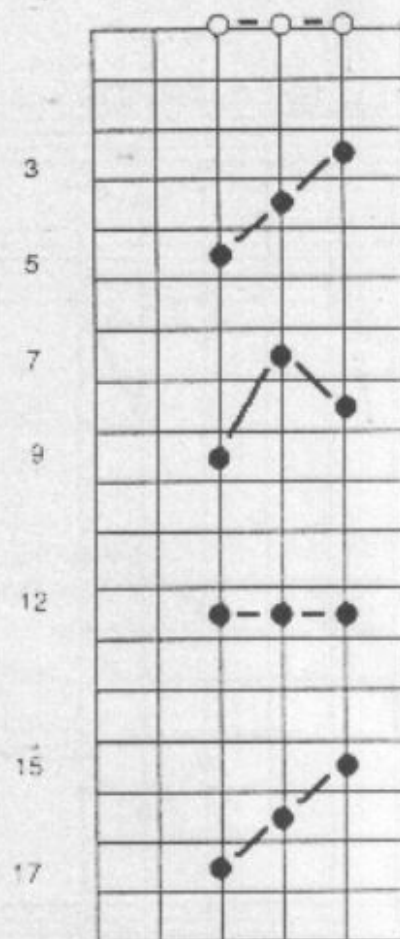
Ex. 18 C TRIADS



Ex. 19 F TRIADS

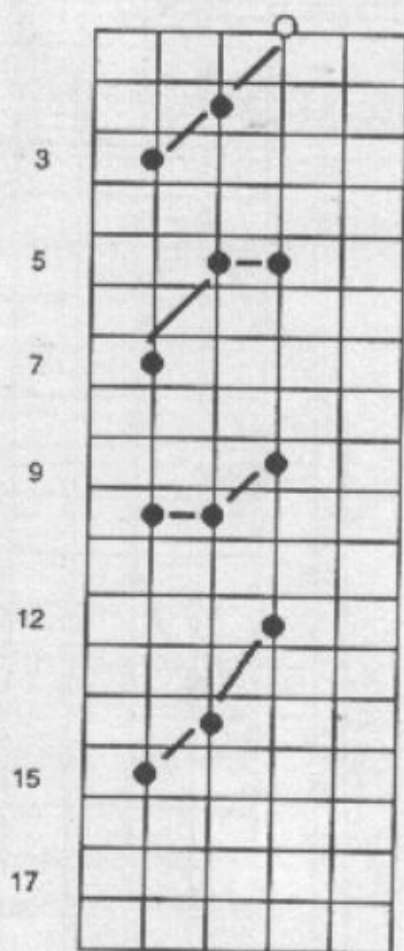


Ex. 20 G TRIADS

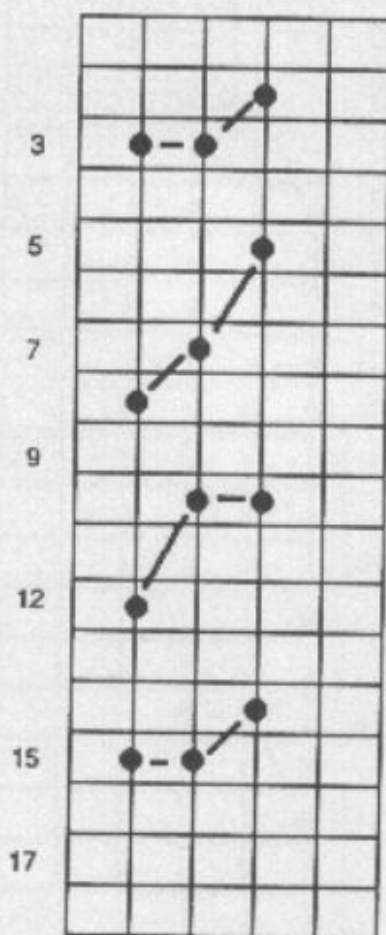


I, IV, V Triads in Cmaj on A, D & G strings.

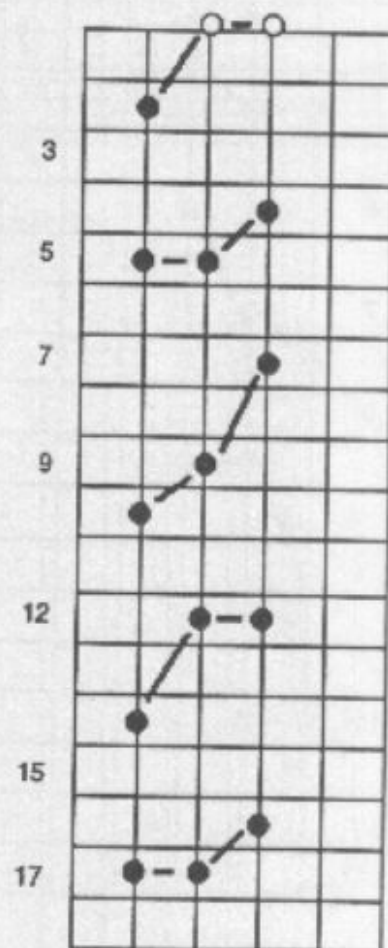
Ex. 21 C TRIADS



Ex. 22 F TRIADS

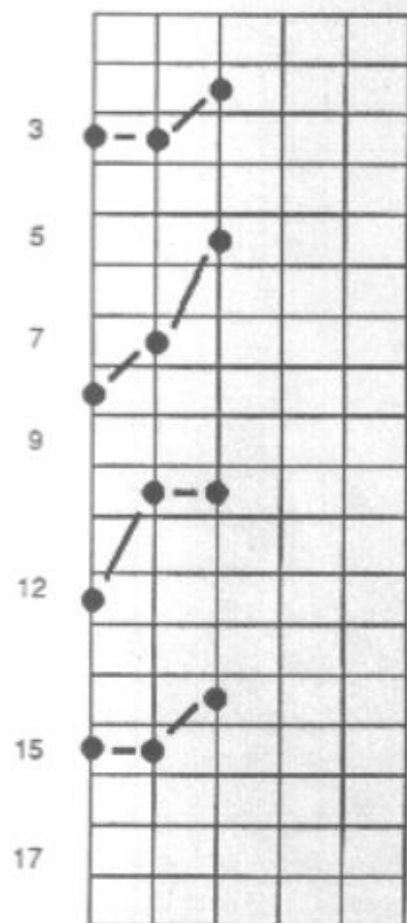


Ex. 23 G TRIADS

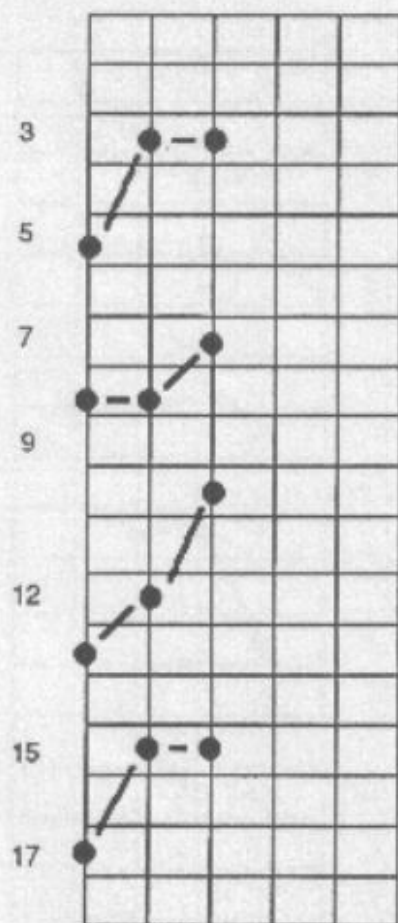


I, IV, V Triads in Cmaj on E, A & D strings.

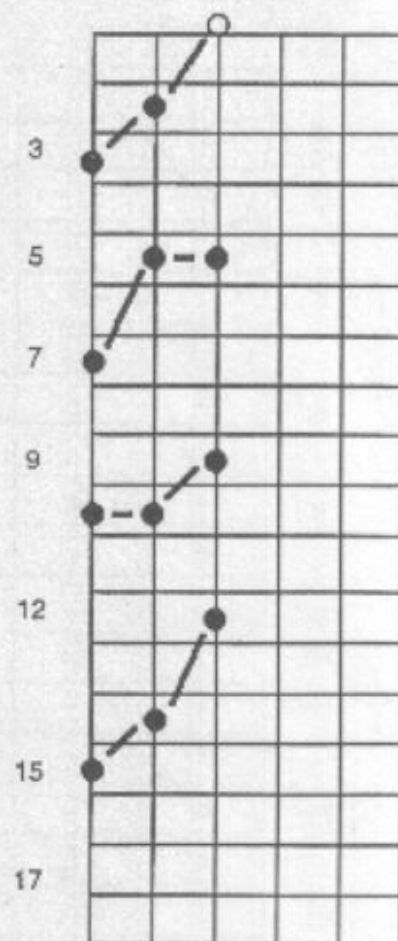
Ex. 24 C TRIADS



Ex. 25 F TRIADS



Ex. 26 G TRIADS



Note that you should hear these triads as they affect the Dmin7 chord. They sound hip against the chord, but ordinary by themselves.

Let's listen to this triad exercise which incorporates our next subject as well, two-string triads.

Ex. 27 Two string triads from Cmaj over Dmin7.

Now, let's look at two-string triads as opposed to the three-string triads.

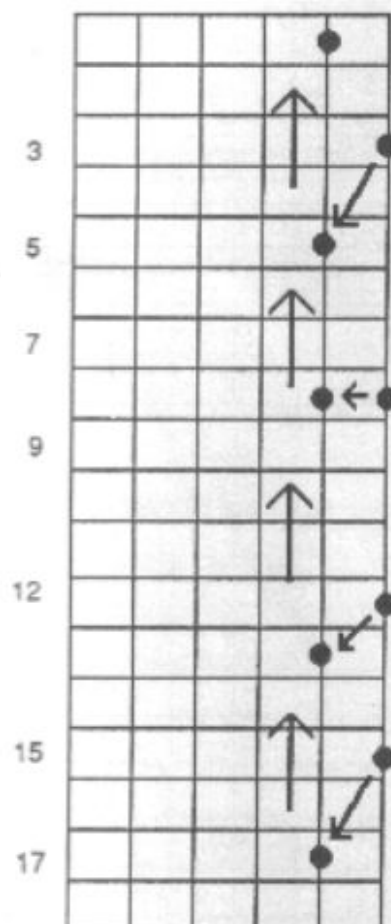
Ex. 28 C TRIADS

Ex. 29 F TRIADS

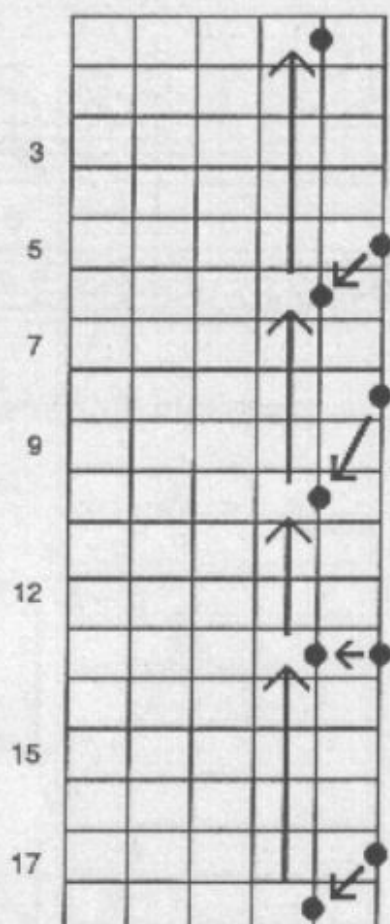
Ex. 30 G TRIADS

Variation, 2-string triads

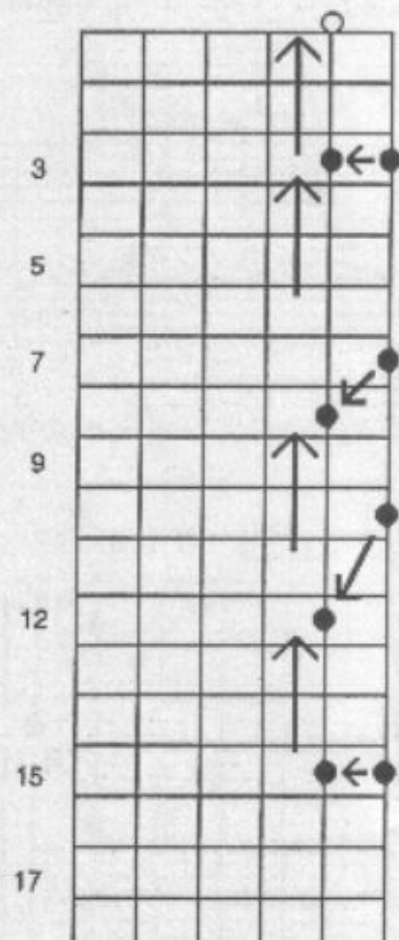
Ex. 31 C TRIADS



Ex. 32 F TRIADS



Ex. 33 G TRIADS



CHORD TYPE: Min7

APPROACH: Dorian Intervals

Any intervals can be chosen. I find 3rds, 4ths, 5ths and 6ths to be the most useful and musical, so let's examine those.

Diatonic 3rds (using the notes of D Dorian = the same notes as C major): C - E, D - F, E - G, F - A, G - B, A - C, B - D.

Let's listen to these over Dmin7.

Ex. 34

Dmin7

Diatonic 3rds from Cmaj.

Ex. 35

Dmin7

3rds on the E & B strings only.

Diatonic 4ths: these sound more angular, oriental almost. Let's listen, first separately, then double stops.

Ex. 36

Dmin7

4ths as a Scale.

Ex. 36 cont

Dmin7

Ex. 36 cont. Treble clef staff shows a sequence of notes with accidentals (sharps and naturals) and a final "etc ->" instruction. Bass clef staff shows a sequence of fret numbers (10, 10, 12, 12, 13, 13, 12, 12, 10, 10, 12, 13) and a final "etc ->" instruction.

Ex. 37

Dmin7

4ths on the E & B strings only.

Ex. 37. Treble clef staff shows a sequence of notes. Bass clef staff shows a sequence of fret numbers (1, 1, 3, 3, 5, 5, 6, 7, 9, 9, 10, 10, 12, 12, 13, 13, 15, 15, 13, 13, 12, 12, 10, 10, 9, 9).

Ex. 38

Dmin7

5ths sound unusual. Let's listen.

Ex. 38. Treble clef staff shows a sequence of notes. Bass clef staff shows a sequence of fret numbers (8, 10, 16, 12, 12, 14, 9, 10, 10, 12, 12, 14, 9, 10, 10, 12, 12, 14, 9, 12, 10, 13, 12, 15).

Ex. 38 continued. Treble clef staff shows a sequence of notes with accidentals and a final "etc ->" instruction. Bass clef staff shows a sequence of fret numbers (10, 12, 12, 13, 14, 16, 12, 13, 10, 12) and a final "etc ->" instruction.

Ex. 39

Dmin7

5ths on the E & B strings.

Musical notation for Ex. 39. The treble clef staff shows a Dmin7 chord (D, F, A, C) and its 5th (A). The bass clef staff shows the fret numbers for the E and B strings: 1, 3, 3, 5, 5, 7, 6, 9, 9, 10, 10, 12, 12, 13, 13, 15, 15, 17, 17, 19, 15, 17, 13, 15.

Ex. 40

Dmin7

Sixths sound very nice. Let's listen.

Musical notation for Ex. 40. The treble clef staff shows a Dmin7 chord (D, F, A, C) and its 6th (B). The bass clef staff shows the fret numbers for the E and B strings: 9, 7, 10, 9, 12, 10, 9, 7, 10, 9, 12, 10, 9, 10, 10, 12, 12, 9, 9, 10, 10, 12, 12.

Musical notation for Ex. 40. The treble clef staff shows a Dmin7 chord (D, F, A, C) and its 6th (B). The bass clef staff shows the fret numbers for the E and B strings: 10, 10, 9, 8, etc. →

Ex. 41

Dmin7

Sixths diatonic to Cmaj on the E & G strings only.

Musical notation for Ex. 41. The treble clef staff shows a Dmin7 chord (D, F, A, C) and its 6th (B). The bass clef staff shows the fret numbers for the E and G strings: 0, 2, 4, 5, 7, 9, 10, 12, 13, 15, 17, 19, 20, 19, 12, 14, 16, 17, 19, 21, 19.

You should be beginning to see how many possibilities there are when approaching a simple min7 chord. The min7 chord (Dorian) has so many possibilities because every note of the Dorian mode sounds good against it; there are no "avoid" notes.

When you hear good improvisers, you can tell how well versed they are. They'll play a phrase that goes up a minor pentatonic, comes down an arpeggio, up again in 4th intervals and down again with a diatonic triad; you get the picture. An intelligent soloist includes many different approaches or colours. That's how one can tell how long and hard that person has studied music and the instrument.

So, summing up this section on min7 (Dorian), we can see that there are certain formulas that will always work and always sound good against any min7 chord.

SUMMARY:

FORMULAS FOR SOLOING OVER MIN7 (DORIAN) IN ANY KEY.

1. Scale: Dorian = mode II of major = 1 2 b3 4 5 6 b7 (9 11 13)
2. Pentatonics/Blues: from root, [up] whole step, [up] 5th.
3. Arpeggios: all diatonic arps, especially maj7 [up] min 3rd, min7 [up] 5th.
4. Triads: all diatonic triads, especially the major triads which are [down] whole step, [up] min 3rd, [up] 4th.
5. Intervals: diatonic 3rds, 4ths, 5ths, 6ths

Now I'll select just one of my personal favorites from each category, really simplifying.

1. Scale: Dorian
2. Pentatonic/Blues: min pent/blues [up] 5th
3. Arpeggio: maj7 [up] min3rd
4. Triad: maj [down] whole step
5. Intervals: 4ths

So over Gmin7 for example, using the above formulas we arrive at the following:

1. Scale: G Dorian = mode II of Fmaj = 1 2 b3 4 5 6 b7; from G = G A Bb C D E F
2. Pentatonic/Blues: Dmin pent (D F G A C) or Dmin blues (D F G Ab Aat C)
3. Arpeggio: Bbmaj7 arp (Bb D F A)
4. Triad: Fmaj
5. Intervals: 4ths diatonic to G Dorian: G-C, A-D, Bb-E etc.

Min7 chord progressions to practice:

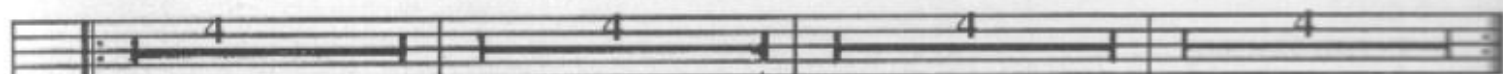
Ex. 42

D min7

F min7

Ab min7

B min7



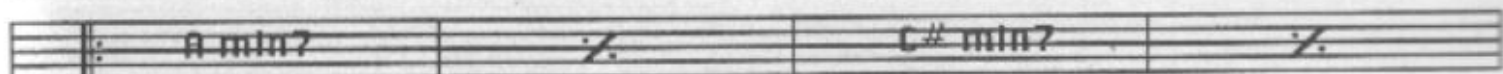
D Dorian

F Dorian

Ab Dorian

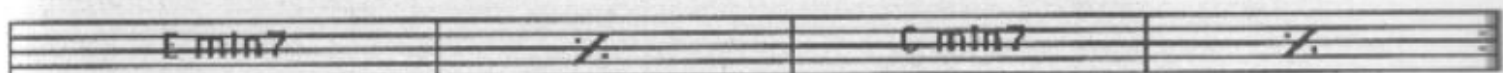
B Dorian

Ex. 43



A Dorian

C# Dorian



E Dorian

C Dorian

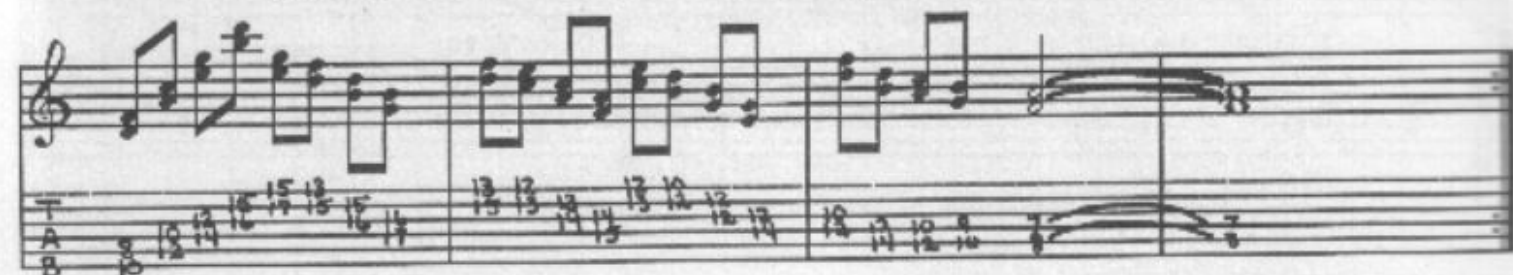
Now, some musical examples. Diatonic 3rds in Cmaj over Dmin7.

Ex. 44

"CAT PAUSE"

8Va

Loco

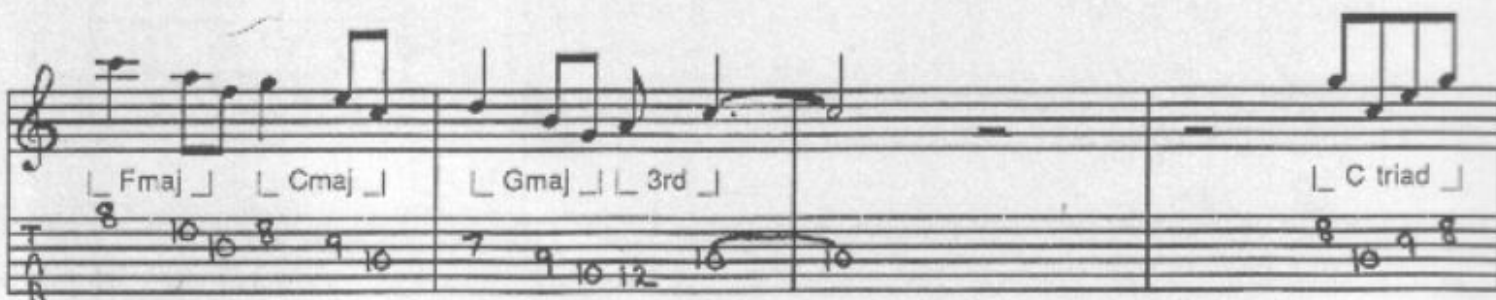


EX. 45

"CAT SNEEZE" (adapted from progression in Ex. 42)

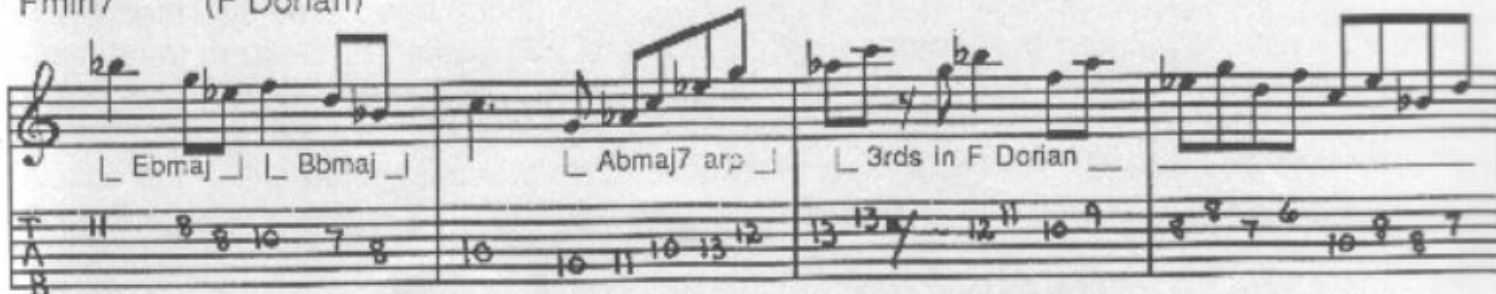
Dmin7

(D Dorian)



Fmin7

(F Dorian)



Ex. 45 con't
Abmin7 (Ab Dorian)

Chord symbols: Eb min pent, Gbmaj, Db maj, Cb maj

Bmin7 (B Dorian)

Chord symbols: D maj7 arp, E maj, D maj7 arp

Make up your own melodies from the formulas discussed in the Dorian chapter over the sample chord progressions, examples 42 and 43.

CHORD TYPE: Min7

APPROACH: Aeolian Scale

Min7 chord as a VI in major: use Aeolian mode (mode VI of major) = 1 2 b3 4 5 b6 b7. Aeolian is also known as natural minor.

Ex. 46

D Aeolian

	b3	b6		b7	b3
		2	5		
3	4	b7	b3	b6	①
5	5	①	4	b7	2
	b6			b3	b6
7		2	5	①	
	b7	b3	b6		4
9			2		
	①	4	b7	b3	5
				b6	
12	2	5	①	4	2
	b3	b6		b7	b3
		2	5		
15	4	b7	b3	b6	①
17	5	①	4	b7	2
	b6			b3	b6

Example: Dmin7: use D Aeolian = mode VI of Fmaj = D E F G A Bb C. You may sometimes see a min7(#5) chord indicated. Dmin7(#5) = D F Bb C. (It may also be written Fsus/D or Bb/D.) Remember that #5 = b6. So you can see that this chord would fit the Aeolian mode (which has a b6) and not the Dorian (which has a nat6). Other than when a min7(#5) chord is indicated, if you choose to use the Aeolian approach for a min7 chord, the b6 note will generally be used as just a passing tone, as it's a bit dissonant; so just be careful with it.

Remember, Aeolian means 1 2 b3 4 5 b6 b7 from any root. Learn Aeolian in other keys as well.

CHORD TYPE: Min7

APPROACH: Aeolian Pentatonics/Blues

Our example is Dmin7 (Aeolian) = VI of Fmaj. So we need to look at the harmonized scale of F major.

Fmaj7	Gmin7	Amin7	Bbmaj7	C7	Dmin7	Emin7(b5)
I	II	III	IV	V	VI	VII

Remember that minor pentatonics (1 b3 4 5 b7) and minor blues (1 b3 4 b5 nat 5 b7) can be extracted from the II, III

and VI of any major scale. From Fmaj, that's Gmin, Amin and Dmin pent/blues which can be played over Dmin7.

Dmin pent or blues sound good.

Amin pent or blues sound good.

Gmin pent or blues contains a Bb; so if a Dmin7(#5) chord is indicated, it sounds very good; but if just a Dmin7 chord is indicated, be careful with it.

Notice that Dmin pent/blues and Amin pent/blues were also in the Dorian approach to Dmin7.

FORMULAS: min pent/blues from root and [up] 5th. Min pent/blues [up] 4th over a min7(#5) chord.

CHORD TYPE: Min7

APPROACH: Aeolian Arpeggios

Dmin7 = 1 b3 5 b7 from D = D F A C.

As before, let's extend Dmin7 to find some more interesting arps to play.

b3 5 b7 9 = F A C E = Fmaj7

5 b7 9 11 = A C E G = Amin7

These two arps sound great over Dmin7. Note that these are the same arps we arrived at when extending Dmin7 in the Dorian mode.

Once again, the only difference between Dorian and Aeolian is the 6 (13) is nat in Dorian and flat in Aeolian. Therefore, we have to extend further to discover an arp which is specifically Aeolian (includes a b6 = b13).

b7 9 11 b13 = C E G Bb = C7

Let's listen to this over Dmin7.

Ex. 47

C7 arpeggio over Dmin7



All arps diatonic to Fmaj sound good over Dmin7.

Fmaj7 Gmin7 Amin7 Bbmaj7 C7 Dmin7 Emin7(b5)

Let's listen.

Ex. 48

First system of triads over Dmin7:

- Fmaj7: Right hand (1, 2, 3, 4), Left hand (3, 2, 1)
- Gmin7: Right hand (5, 6, 3, 3), Left hand (5, 6, 3, 3)
- Amin7: Right hand (5, 5, 8, 10), Left hand (5, 5, 8, 10)
- Bbmaj7: Right hand (6, 7, 8), Left hand (6, 7, 8)

Second system of triads over Dmin7:

- C7: Right hand (8, 11, 13, 10), Left hand (10, 9, 8, 11, 13, 10)
- Dmin7: Right hand (10, 12, 14), Left hand (10, 12, 14)
- Emin7(b5): Right hand (11, 15, 17, 13), Left hand (12, 14, 16, 13, 15, 12)
- Fmaj7: Right hand (14, 15), Left hand (14, 15)

Arps over Dmin7 that are specifically Aeolian:

Gmin7 = G Bb D F = 11 b13 1 b3 of Dmin7.

Bbmaj7 = Bb D F A = b13 1 b3 5 of Dmin7.

C7 = C E G Bb = b7 9 11 b13 of Dmin7.

Emin7(b5) = E G Bb D = 9 11 b13 1 of Dmin7.

That leaves three which are common to both Dorian and Aeolian:

Fmaj7 = F A C E = b3 5 b7 9 of Dmin7.

Amin7 = A C E G = 5 b7 9 11 of Dmin7.

Dmin7 = D F A C = 1 b3 5 b7 of Dmin7.

CHORD TYPE: Min7

APPROACH: Aeolian Triads

Example: Dmin7 = VI of Fmaj, so we need to look at the harmonized Fmaj scale.

Fmaj7 Gmin7 Amin7 Bbmaj7 C7 Dmin7 Emin7(b5)

All diatonic triads will work over Dmin7, especially the major triads, found on I, IV and V of major. In F, that's F, Bb and C.

Let's listen to these three triads over Dmin7.

Ex. 49

F, Bb and C triads (Aeolian) over Dmin7.

Bb triad is specifically Aeolian [good over Dmin7(#5)].

C and F triads are common to both the Aeolian and Dorian approaches to Dmin7.

FORMULAS: maj triads [down] whole step, [up] min3rd. Also maj triad on [up] b6 (Aeolian only).

CHORD TYPE: Min7

APPROACH: Aeolian Intervals

3rds, 4ths, 5ths, and 6ths all work fine. You can use the interval examples (Ex. 34-41), but over an Amin7 VI chord instead of Dmin7.

SUMMARY:

FORMULAS FOR SOLOING OVER MIN7 AS VI IN MAJOR (AEOLIAN) IN ANY KEY

1. Scale: Aeolian
2. Pent/Blues: min from root, [up] 4th, [up] 5th.
3. Arpeggios: all those diatonic to Aeolian, especially maj7 [up] min3rd, min7 [up] 5th.
4. Triads: all those diatonic to Aeolian especially, major triads [down] whole step, [up] min3rd, [up] min 6th.
5. Intervals: 3rds, 4ths, 5ths, 6ths.

MY FAVORITES:

1. Scale: Aeolian
2. Pent/blues: min [up] 5th
3. Arpeggio: maj7 [up] min3rd
4. Triad: [down] whole step
5. Interval: 3rds.

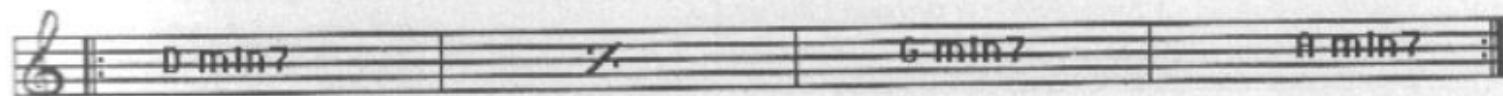
Progressions to Practice (Aeolian)

Ex. 50



A Aeolian throughout

Ex. 51



D Aeolian throughout

Ex. 52



G Aeolian

Bb Aeolian

D Aeolian

Ex. 53

Amin7

"STICKMAN"

(based on Ex. 50)



G triad

F triad

Ex. 53 con't

The musical notation for Exercise 53 continues with three systems:

- System 1:** Features the F major scale in the treble clef. The bass line includes a G triad (frets 7, 9, 10) and a 3rd interval (frets 8, 10). The treble line has a G triad (frets 3, 5, 7) and a 3rd interval (frets 4, 6).
- System 2:** Features the A minor 7th chord in the treble clef. The bass line includes an A minor triad (frets 17, 13, 14), a G triad (frets 14, 16, 12), and an F triad (frets 12, 14, 10). The treble line includes an A minor triad (frets 17, 12, 13) and an F major 7th arpeggio (frets 13, 14, 15, 17).
- System 3:** Features the F major scale in the treble clef. The bass line includes 3rds (frets 15, 12, 12) and a scale run (frets 13, 10, 10, 10, 12). The treble line includes a G triad (frets 3, 5, 7) and a 4th interval (frets 12, 14).

CHAPTER II: MAJOR 7 CHORDS

Now let's move on to the maj7 chord. A lot of people have a hard time making a maj7 sound bluesy, a la Carlton. Some of the mysteries will unfold with the help of our little systematic approach.

Just as a min7 chord can be treated in two ways, as a II in major (Dorian) or as a VI in major (Aeolian), the maj7 chord can also be approached in two different ways:

2a Maj7 as a I chord in major: the chord = 1 3 5 7 (9 11 13); the scale to use is Major = 1 2 3 4 5 6 7 = mode IV of major
(9) (11) (13)

2b Maj7 as a IV chord in major: the chord = 1 3 5 7 (9 #11 13); the scale to use is Lydian mode = 1 2 3 #4 5 6 7 = mode IV of major
(9) (#11) (13)

Example: Cmaj7 can be I in C major

Cmaj7
I

Dmin7
II

Emin7
III

Fmaj7
IV

G7
V

Amin7
VI

Bmin7(b5)
VII

or IV in G major.

Gmaj7
I

Amin7
II

Bmin7
III

Cmaj7
IV

D7
V

Emin7
VI

F#min7(b5)
VII

You can see that the chords differ only by the 11, which is nat11 over a maj7 chord as I, and #11 over a maj7 chord as IV. The scales differ only by the nat 4 in the Major scale versus the #4 in the Lydian mode. (4 = 11, #4 = #11.)

Let's look first at maj7 as a I (Major Scale).

CHORD TYPE: Maj7

APPROACH: Major Scale

Maj7 chord as a I:

use the Major scale = 1 2 3 4 5 6 7.

Example:

Cmaj7 as a I in C:

use Cmaj scale = C D E F G A B.

Ex. 54

	1	2	3	4	5	6	7
	Cmaj Scale						
4						①	4
	7	3	6				
3	5	①	4		2	5	
			7				
5	6	2	5	①	3	6	
				4			
7	7	3	6	2			7
	①	4			5	①	
9			7	3			
	2	5	①	4	6	2	
12	3	6	2	5	7	3	
	4				①	4	
		7	3	6			
15	5	①	4		2	5	
			7				
17	6	2	5	①	3	6	
					4		

Ex. 55

Cmaj Scale



CHORD TYPE: Maj7

APPROACH: Pentatonics/Blues

For Cmaj7 as I in C, we need to look at the harmonized C Major scale.

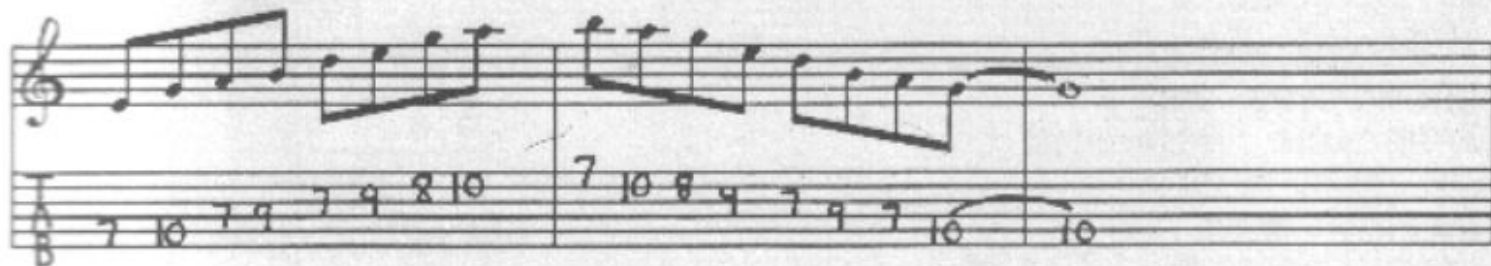
Cmaj7	Dmin7	Emin7	Fmaj7	G7	Amin7	Bmin7(b5)
I	II	III	IV	V	VI	VII

The minor pentatonics and blues can be extracted from the II, III and VI of the Major scale. In C, that's Dmin, Emin and Amin.

Let's Listen.

Ex. 56

Emin pentatonic over Cmaj7



Okay - Dmin pent sounds awful, so we avoid it.

Amin sounds only okay.

Emin sounds the best of these three.

Amin and Emin pent are common to both the Major and Lydian approaches to maj7 because they contain no 4 or #4 of C.

FORMULA: Min pent/blues [up] 3rd, [up] 6th.

Ex. 57

Blues scales [up] 3rd, [up] 6th over Cmaj7.

Ex. 57 shows two musical examples. The first, labeled 'E Blues', is in treble clef and shows an ascending scale: E4, F#4, G4, A4, B4, C5. The second, labeled 'A Blues', is in treble clef and shows an ascending scale: A4, B4, C5, D5, E5, F#5, G5. Below each scale is a bass line with fingerings: for E Blues, 7 10 7 8 9 7 9 8; for A Blues, 7 10 7 8 9 8 10 8.

CHORD TYPE: Maj7**APPROACH:** Major Arpeggios

The next approach is arpeggios.

Cmaj7 = 1 3 5 7 = C E G B

Let's extend. 3 5 7 9 = E G B D = Emin7

Let's Listen.

Ex. 58

Emin7 Arpeggio over Cmaj7

Ex. 58 shows a musical example in treble clef. The first measure shows an ascending arpeggio: E4, G4, B4, D5. The second measure shows a descending arpeggio: D5, B4, G4, E4. The third measure shows a descending arpeggio: D5, B4, G4, E4. The fourth measure shows a descending arpeggio: D5, B4, G4, E4. Below the arpeggios are fingerings: 7 10 9 7 9 8 7 10, 10 12 7 12 10 7 8 9, 10 12 7 12 10 7 8 9, 10 12 7 12 10 7 8 9.

Emin7 arp is very good over Cmaj7. Now the next extension is 5 7 9 11. There is a problem in that the 11 (4) doesn't sound good over a maj7. You're better off using the Lydian approach for the higher extensions since the #11 sounds better than the nat11. (The 4 or 11 sounds fine in passing).

FORMULA: min7 arp [up] 3rd

CHORD TYPE: Maj7

APPROACH: Major Triads

Example: Cmaj7 as I of C. The three major triads, I, IV and V, in C are C, F and G.

Over Cmaj7, C triad sounds just okay*
F doesn't sound any good*
G sounds very good

FORMULA: maj triad [up] 5th.

*Note that C and F triads sound better when used over a Cmaj chord with no 7 and all three sound great over a C bass.

Ex. 59

G maj triad over Cmaj7

CHORD TYPE: Maj7

APPROACH: Major Intervals

3rds, 4ths, 5ths and 6ths all work fine. To practice, play exercises 34-41 over a Cmaj7 Chord.

SUMMARY:

FORMULAS FOR SOLOING OVER MAJ7 AS A I CHORD (MAJOR SCALE).

1. Scale: Major = 1 2 3 4 5 6 7
2. Pentatonic/Blues: min [up] 3rd, min [up] 6th.
3. Arpeggios: min7 [up] 3rd.
4. Triads: maj [up] 5th
5. Intervals: 3rds, 4ths, 5ths, 6ths.

MY FAVORITES:

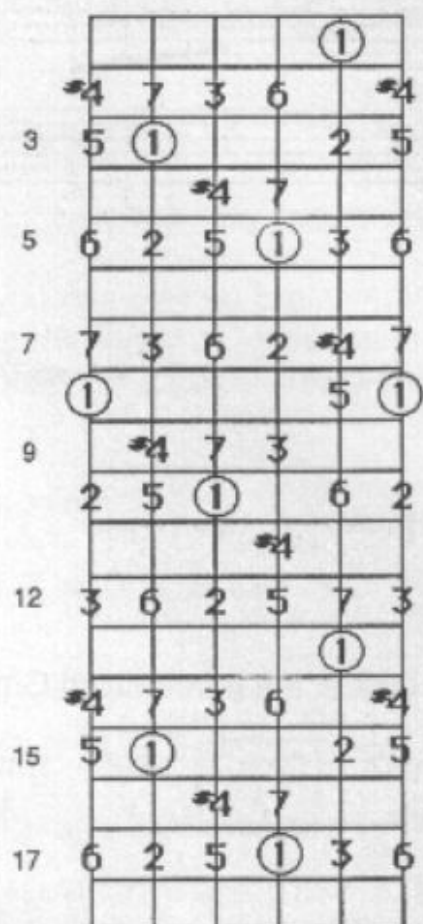
1. Scale: Major
2. Pentatonic/Blues: min [up] 3rd
3. Arpeggio: min7 [up] 3rd.
4. Triad: maj [up] 5th
5. Intervals: 6ths.

So, for Dmaj7 as a I in D, using the above formulas we get . . .

1. Scale: Dmaj = D E F# G A B C#
2. Pent/Blues: F#min
3. Arp: F#min7
4. Triad: Amaj
5. Intervals: 6ths diatonic to Dmaj.

CHORD TYPE: Maj7
APPROACH: Lydian Scale

Ex. 60 LYDIAN



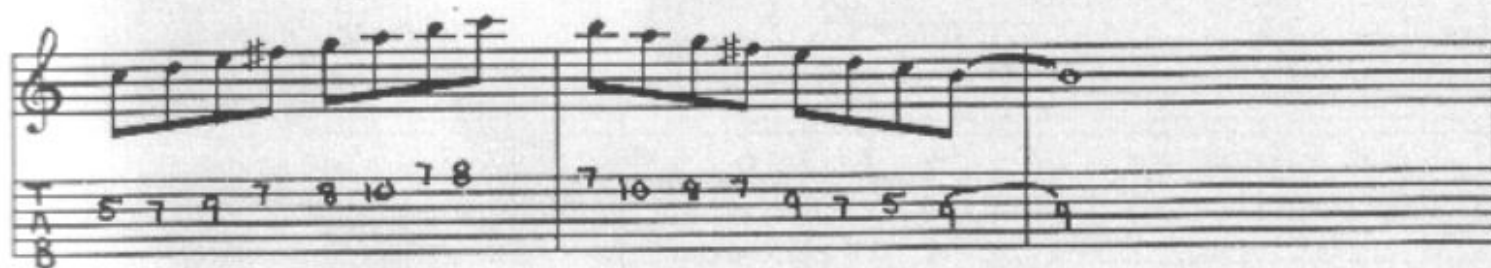
Maj7 chord as a IV in major: use the Lydian mode = 1 2 3 #4 5 6 7 = mode IV of major.

Example: Cmaj7 as a IV. C is IV of G.

Gmaj7	Amin7	Bmin7	Cmaj7	D7	Emin7	F#min7(b5)
I	II	III	IV	V	VI	VII

C Lydian = 1 2 3 #4 5 6 7 from C = C D E F# G A B = the same notes, same harmonized scale as G major.

Ex. 60(a) C Lydian over Cmaj7



Any maj7 (#11) chord is Lydian.

Don't be thrown by a maj7(b5) chord. Remember, b5 = #4, so this fits into the Lydian approach.

CHORD TYPE: Maj7

APPROACH: Lydian Pentatonics/Blues

Example: Cmaj7 (Lydian)

C Lydian is mode IV of Gmaj so let's look at the harmonized Gmaj scale.

Gmaj7	Amin7	Bmin7	Cmaj7	D7	Emin7	F#min7(b5)
I	II	III	IV	V	VI	VII

Remember, that the minor pent (1 b3 4 5 b7) and minor blues (1 b3 4 b5 nat 5 b7) can be extracted from II, III and VI of major. Therefore, in C Lydian = Gmaj, we have Amin, Bmin and Emin pent or blues which can be played over Cmaj7.

Let's listen.

Ex. 61

Bmin Pentatonic over Cmaj7

Ex. 62

Combination Emin and Bmin Blues over Cmaj7

Amin sounds only okay.

Bmin and Emin both sound very good.

Bmin pent or blues over Cmaj7 is specifically Lydian because it contains an F#.

So the gist is, over a Cmaj7 you can play an Emin pent/blues (**FORMULA:** min pent/blues [up] 3rd) whether you're using the Major or Lydian approach. Use a Bmin pent/blues (**FORMULA:** min [down] 1/2 step) if you wish to play specifically Lydian.

CHORD TYPE: Maj7

APPROACH: Lydian Arpeggios

Cmaj7 = 1 3 5 7 = C E G B

Let's extend.

3 5 7 9 = E G B D = Emin7

Emin7 arp is very good over Cmaj7. **FORMULA:** min7 arp [up] 3rd.

5 7 9 #11 = G B D F# = Gmaj7

7 9 #11 13 = B D F# A = Bmin7

These sound good too. Gmaj7 and Bmin7 played over Cmaj7 are specifically Lydian because of the #11 (#4).

All diatonic arpeggios from Lydian work fine.

FORMULAS: maj7 arp [up] 5th, min7 arp [down] 1/2 step.

Ex. 63 Gmaj7 over Cmaj7 chord

Bmin7 over Cmaj7 chord



CHORD TYPE: Maj7

APPROACH: Lydian Triads

All triads, diatonic to C Lydian (same notes as Gmaj) sound good over Cmaj7. Let's examine the major triads, which are found on I, IV and V of major. In Gmaj, that's G, C and D.

G triad over Cmaj7 sounds very good. **FORMULA:** maj triad [up] 5th.

C sounds just okay.

D sounds very good. **FORMULA:** Maj triad [up] whole step.

D triad over Cmaj7 is specifically Lydian because of the F# (#11 of C).

Ex. 64 Dmaj triad over Cmaj7 chord



CHORD TYPE: Maj7

APPROACH: Intervals

3rds, 4ths, 5ths and 6ths diatonic to Lydian (mode IV of major) all sound great.

For practice, play Ex. 34-41 over a Fmaj7 chord (IV in Cmaj).

SUMMARY:

FORMULAS FOR SOLOING OVER MAJ7 (LYDIAN)

1. Scale: Lydian = 1 2 3 #4 5 6 7 = mode IV of major
2. Pent/blues: min [up] 3rd, [down] 1/2 step, [up] 6th.
3. Arpeggios: All diatonic arps, especially min7 [up] 3rd, maj7 [up] 5th, min7 [down] 1/2 step.
4. Triads: All diatonic triads, especially maj [up] 5th, maj [up] whole step.
5. Intervals: 3rds, 4ths, 5ths, 6ths.

MY FAVORITES:

1. Scale: Lydian
2. Pent/blues: [down] 1/2 step
3. Arp: min7 {down] 1/2 step
4. Triad: maj [up] whole step
5. Interval: 6ths

So over Amaj7, using the above formulas, we get:

1. Scale: A Lydian = A B C# D# E F# G# = mode IV of Emaj
2. Pent/blues: G#min
3. Arp: G#min7
4. Triad: B
5. Interval: 6ths diatonic to A Lydian

CHORD PROGRESSIONS

Ex. 65

A maj7	C maj7	Eb maj7	Gb maj7
A major or A lydian	C major or C lydian	Eb major or Eb lydian	Gb major or Gb lydian

Ex. 66

D major	Bb lydian
G major	C lydian

Ex. 67

COMBINATIONS (CHAPTER 1 & 2)

13 G major G dorian

This musical staff shows two scale runs. The first run is for G major, starting on G4 and ascending to G5. The second run is for G dorian, starting on G4 and ascending to G5. Both runs are marked with a double bar line and repeat dots at the beginning and end.

Ex. 68

17 A major E dorian

This musical staff shows two scale runs. The first run is for A major, starting on A4 and ascending to A5. The second run is for E dorian, starting on E4 and ascending to E5. Both runs are marked with a double bar line and repeat dots at the beginning and end.

21 D major G dorian

This musical staff shows two scale runs. The first run is for D major, starting on D4 and ascending to D5. The second run is for G dorian, starting on G4 and ascending to G5. Both runs are marked with a double bar line and repeat dots at the beginning and end.

Ex. 69

25 E major F dorian

This musical staff shows two scale runs. The first run is for E major, starting on E4 and ascending to E5. The second run is for F dorian, starting on F4 and ascending to F5. Both runs are marked with a double bar line and repeat dots at the beginning and end.

29 F lydian F dorian

This musical staff shows two scale runs. The first run is for F lydian, starting on F4 and ascending to F5. The second run is for F dorian, starting on F4 and ascending to F5. Both runs are marked with a double bar line and repeat dots at the beginning and end.

Ex. 70 **A maj 7** "THE BUMBLE TREE" (Based on Ex. 68) **E min 7**

The first system of musical notation for 'THE BUMBLE TREE' consists of a treble and bass staff. The treble staff contains a melodic line with a repeat sign and a percentage symbol (%). The bass staff contains a bass line with a bracketed section labeled 'E triad' and a percentage symbol (%). The notes in the bass line are 7, 4, 5, 4, 4, 4, 5, 4, 5, and 2.

The second system of musical notation for 'THE BUMBLE TREE' consists of a treble and bass staff. The treble staff contains a melodic line with a repeat sign and a percentage symbol (%). The bass staff contains a bass line with a bracketed section labeled 'G maj 7 arp' and a percentage symbol (%), a bracketed section labeled 'A triad' and a percentage symbol (%), and a bracketed section labeled 'F# min 7 arp' and a percentage symbol (%). The notes in the bass line are 4, 5, 4, 4, 7, 7, 8, 6, 7, 5, 6, 6, 7, 5, 5, 7, 5, 5, 6, 4, 7, and 5.

The third system of musical notation for 'THE BUMBLE TREE' consists of a treble and bass staff. The treble staff contains a melodic line with a repeat sign and a percentage symbol (%). The bass staff contains a bass line with a bracketed section labeled 'F triad' and a percentage symbol (%), and a bracketed section labeled 'D min pent' and a percentage symbol (%). The notes in the bass line are 5, 6, 5, 5, 6, 5, 6, 5, 7, 6, 6, 5, 8, 8, and 10.

CHAPTER III: UNALTERED DOMINANT 7 CHORDS

Basically there are two types of unaltered dominant chords (unaltered meaning they contain a nat9, not a b9 or a #9, and a nat5 or a b5 but not a #5):

3a Dominant sus4 or dominant 11 chords, as a V in major, contain a 4 or 11 instead of 3.

The chord: 1 4 5 b7 (9 11 13)

Examples (C root):

C7sus4 C9sus4 C11 C13sus4 Bb/C Gmin7/C Bbmaj7/C

The scale to use with dominant sus4 chords is mode V of major = Mixolydian

= 1 2 3 4 5 6 b7

(9) (11) (13)

3b Lydian dominant chords: IV in melodic minor.

The chord: 1 3 5 b7 (9 #11 13)

(b5)

Examples: C7 C9 C13 C7(b5) C9(b5) Bbmaj7(#5)/C C9(#11)

The scale to use with Lydian dominant chords is the Lydian flat seven mode, which is mode

IV of melodic minor = 1 2 3 #4 5 6 b7

(9) (#11) (13)

When the extensions aren't specified on a dominant chord (for example, when only C7 is indicated) and it doesn't function as a V moving to I (for example, the next chord after the C7 is not F or Fmin), this is the best type of chord and scale to use.

Compare these two approaches and you can see that the only difference between the scales is nat4 in Mixolydian vs. #4 in Lydian flat seven. 4 = 11, #4 = #11.

So, the nat4/nat11 relates to the Mixolydian dominant and the #4/#11, relates to the Lydian b7 dominant. Some chords could be treated as either scale. For instance, C7, C9 and C13, do not specify the character of the 4th or 11th.

Now, let's look at the possibilities within Mixolydian and Lydianb7 separately.

CHORD TYPE: Dominant 7 Sus 4

APPROACH: Mixolydian Scale

Use MIXOLYDIAN Mode = 1 2 3 4 5 6 b7 (9) (11) (13) = mode V of major.

EXAMPLE: C7sus4 as V in major.

F major = F G A B \flat C D E F G A B \flat etc.

Mode V of Fmaj = C Mixolydian = C D E F G A B \flat

Ex. 71

C Mixolydian scale over C7 sus 4 chord

Ex. 72 C Mixolydian

	4	b7		①	4
		3	6		
3	5	①	4	b7	2
5	6	2	5	①	3
	b7			4	b7
7		3	6	2	
	①	4	b7	5	①
9			3		
	2	5	①	4	6
				b7	
12	3	6	2	5	3
	4	b7		①	4
		3	6		
15	5	①	4	b7	2
17	6	2	5	①	3
	b7			4	b7

CHORD TYPE: Dominant 7 Sus 4

APPROACH: Mixolydian Pentatonics/Blues

For C7sus4: use C Mixolydian = mode V major (F)

HARMONIZED F Major scale = Fmaj7 Gmin7 Amin7
Bbmaj7 C7 Dmin7 Emin7b5.

Remember that minor pentatonics/blues can be built on the II, III, and IV degrees of the major scale. So for F major, Gmin, Amin and Dmin pentatonics/blues can be played over C7sus4 (or any other Mixolydian chord listed at the beginning of the chapter).

FORMULA: minor pentatonics/blues [up] 5th, [up] 6th or [up] whole step.

Let's Listen.

Ex. 73

Gmin pentatonic over C7sus4

Ex. 74

Amin pentatonic over C7sus4

Ex. 75

Dmin pentatonic over C7sus4

CHORD TYPE: Dominant 7 Sus4**APPROACH:** Mixolydian Arpeggios

CII = 1 5 b7 9 11

(in a dominant 11 chord, the 3 is omitted because it clashes with the 11).

 $\cancel{1} \cancel{2} \cancel{3} 5 b7 9 11 = \cancel{C} G Bb D F = Gmin7$ $\cancel{1} \cancel{2} b7 9 11 13 = Bb D F A = Bbmaj7$

These two arps sound good over dominant sus4 chords because they are the most closely related.

FORMULA: min7 arp [up] 5th, maj7 arp [down] whole step.

ALL OTHER DIATONIC ARPS IN F MAJ (C MIXOLYDIAN) SOUND GOOD OVER C DOMINANT SUS CHORDS.

Ex. 76 Gmin7 arpeggio over C7 sus4

— 8 VA —

Bass staff fret numbers: 10 13 12 10 12 11 10 13 15 13 10 11 12 10 12 13 10

Ex. 77 Bb maj7 arpeggio over C7 sus4

Bass staff fret numbers: 6 5 3 7 8 7 6 5 6 5 6 7 8 7 3 5 6

Ex. 78 Diatonic arpeggio's from Fmaj over C7 sus4

Bass staff fret numbers for Fmaj7: 8 7 10 9 10 7 8 10

Bass staff fret numbers for Gmin7: 7 10 9 8 10 10 7 10

Bass staff fret numbers for Amin7: 9 8 11 10 12 8 10 10

Bass staff fret numbers for Bbmaj7: 10 9 8 11 8 10 10 10

CHORD TYPE: Dominant 7 Sus 4

APPROACH: Mixolydian Triads

C Mixolydian is mode V of F major. The three major triads (I, IV, and V) of F are F, Bb and C.

Let's listen to these over C7sus4.

Ex. 79 F triad

Ex. 79 shows the F triad (F, A, C) over a C7sus4 chord. The notation consists of a treble clef staff and a bass staff. The treble staff contains a melodic line starting on F4, moving up stepwise to A4, then C5, and finally descending back to F4. The bass staff contains a series of chords, each marked with a 'V' and a number indicating the fret position: 8, 12, 10, 10, 10, 8, 13, 13, 8, 10, 10, 10, 10, 12, 8.

Ex. 80 Bb triad over C7 sus4

Ex. 80 shows the Bb triad (Bb, D, F) over a C7sus4 chord. The notation consists of a treble clef staff and a bass staff. The treble staff contains a melodic line starting on Bb4, moving up stepwise to D5, then F5, and finally descending back to Bb4. The bass staff contains a series of chords, each marked with a 'V' and a number indicating the fret position: 8, 7, 6, 6, 10, 10, 6, 6, 7, 8, 8.

Ex. 81 C triad over C7 sus4

Ex. 81 shows the C triad (C, E, G) over a C7sus4 chord. The notation consists of a treble clef staff and a bass staff. The treble staff contains a melodic line starting on C4, moving up stepwise to E4, then G4, and finally descending back to C4. The bass staff contains a series of chords, each marked with a 'V' and a number indicating the fret position: 8, 8, 12, 10, 10, 9, 8, 8, 12, 12, 8, 8, 8, 9, 10, 10, 12, 8.

They all sound good. All other diatonic triads in F major work well too.

FORMULAS: Major triads [up] 4th, [down] whole step and from the root.

CHORD TYPE: Dominant 7 Sus 4

APPROACH: Mixolydian Intervals

3rds 4ths 5ths 6ths all work nicely.

Let's listen.

Ex. 82 Diatonic 3rds in C Mixolydian (Fmaj) over C7 sus4

8 7 10 8 12 10 8 7 10 8 12 10 8 7 10 9

Ex. 83 Diatonic 4ths in C Mixolydian (F maj) over C7 sus4

8 8 10 10 12 12 8 8 10 10 12 12 8 9 10 10

Ex. 83 con't

12 12 9 10 10 11 12 13 10 10 11 12 13 13

Ex. 84 Diatonic 5ths in C Mixolydian (Fmaj) over C7 sus4

8 10 10 12 7 8 8 10 10 12 7 9 8 10 10 12

7 10 9 11 10 13 8 10 10 12

Ex. 85 Diatonic 6ths in C Mixolydian over C7 sus4

8 7 10 8 12 10 8 7 10 9 12 10 8 8 10 10 12 11 9 8 10 10 12 12 12

SUMMARY:

FORMULAS FOR SOLOING OVER DOMINANT 7 SUS 4 CHORDS. (MIXOLYDIAN SCALE)

1. Scale = Mixolydian
2. Pent/blues minor [up] whole step, [up] 5th, [up] 6th.
3. Arpeggios = min7 [up] 5th, maj7 [down] whole step (all diatonic arps to related major scale)
4. Triads = [up] 4th, [down] whole step, root.
5. Intervals = 3rds, 4ths, 5ths, 6ths.

MY FAVORITES:

1. Mixolydian
2. Minor pent/blues [up] whole step
3. Maj7 arp [up] 4th.
4. Major triad [up] 4th.
5. 6ths.

Using these formulas over E7sus4 =

1. E Mixolydian = 1 2 3 4 5 6 b7 = mode V of A major (E F# G# A B C# D).
2. Minor pent/blues [up] whole step = F#.
3. Maj7 arp [up] 4th = Amaj7.
4. Major triad [up] 4th = A.
5. 6ths diatonic to A major.

CHORD TYPE: Lydian Dominant

APPROACH: Lydian b7 Scale

Now let's look at Lydian dominants.

1 3 5 b7 9 #11 13 (#11 = b5 = #4).

Our example will be C9. The scale to use on Lydian dominants is Lydian b7, 1 2 3 #4 5 6 b7. This scale is Mode IV of Melodic minor scale.

eg. C9 = chord IV of G melodic minor.

G melodic minor = 1 2 b3 4 5 6 7 (9) (11) (13) = G A Bb C D E F#.

Mode IV = C D E F# G A Bb = C Lydian b7 (Lydian means raised 4[#4]; Lydian b7 = major scale with #4 and b7).

Ex. 86

C Lydian b7 over C9

8 10 12 9 10 12 9 10 12 9 11 12 10 11 13 10 13 11 10 12 11 9 12 10 8 12 10 9 12 10 8

Ex. 87 C Lydian b7

	b7			1	
#4		3	6		#4
3	5	1	b7	2	5
		#4			
5	6	2	5	1	3
b7					b7
7		3	6	2	#4
	1	b7		5	1
9		#4		3	
	2	5	1		6
			#4	b7	
12	3	6	2	5	3
	b7			1	
#4		3	6		#4
15	5	1	b7	2	5
		#4			
17	6	2	5	1	3
b7					b7

CHORD TYPE: Lydian Dominant

APPROACH: Lydian b7 Pent/blues

HARMONIZED MELODIC MINOR SCALE

Gmin (Maj7) Amin7 Bbmaj7#5 C7 D7 Emin7b5

F#min7b5

There is one minor pent/blues in melodic minor, at the 2nd degree.

C9 = C Lydian b7 = G melodic minor. 2nd degree of G melodic minor = A. Therefore, A minor pent/blues is possible.

FORMULA = min pent/blues [down] min 3rd from chord.

Let's Listen

Ex. 88 Amin Pent over C9

Handwritten musical notation for "The Rose Tree" on a grand staff. The treble clef staff contains a melody of eighth notes. The bass clef staff contains a bass line of eighth notes. The key signature has one flat (B-flat), and the time signature is 4/8.

CHORD TYPE: Lydian Dominant
APPROACH: Lydian b7 Arpeggios

C7 = 1 3 5 b7. Let's extend. 1 3 5 b7 9 = C E G Bb D = Emin7b5

5 b7 9 #11 = G Bb D F# = Gmin(maj7).

b7 9 #11 13 = Bb D F# A = Bbmaj7#5

FORMULAS: min7b5 arp [up] 3rd, min (maj7) arp [up] 5th, maj7#5 arp [down] whole step.
 ALL DIATONIC ARPS OF G MELODIC MINOR SOUND GOOD OVER C LYDIAN
 DOMINANTS. Let's listen.

Ex. 89 Emin7b5 arpeggio over C9

Ex. 90 Gmin(maj7) arpeggio over C9

Ex. 91 Bbmaj7#5 arpeggio over C9

*Note: Key signature for 9 melodic minor has all B's flat, all F's sharp.

Ex. 92

Diatonic arps in C Lydian b7 (Gmel min) over C9

First system chords: G min(maj7) | A min7 | Bb maj7#5 | C7 | D7 | E min7b5

Second system chords: F# min7b5 | G min(maj7) | F# min7b5

etc. down

CHORD TYPE: Lydian Dominant

APPROACH: Lydian b7 Triads

First we'll look at major triads. There are two major triads in melodic minor. They are on the 4th and 5th degrees. Our example chord is C9 = C Lydian b7 = G melodic minor. 4th and 5th degrees of G melodic minor are C and D. Let's listen to C and D major triads over C9.

Ex. 93 Cmaj and Dmaj triads over C9

First system chords: D | C | D | C

Second system chords: D | C

FORMULA: MAJOR TRIADS from ROOT and [up] whole step.
 All diatonic triads in G melodic minor sound good over C Lydian dominant chords.

Ex. 94 Diatonic triads from C Lydian b7 over C9

Ex. 95 C Lydian b7 in triads over C9

CHORD TYPE: Lydian Dominant
APPROACH: Lydian b7 Intervals

3rds and 6ths are useful in melodic minor (the 4th and 5th intervals are almost all augmented 4ths and diminished 5ths). So, for our purposes we'll just use 3rds and 6ths in melodic minor).

Ex. 96

Diatonic 3rds in C Lydian b7 over C9

Ex. 97

Diatonic 6ths in C Lydian b7 over C9

SUMMARY:

FORMULAS FOR SOLOING OVER LYDIAN DOMINANTS (LYDIAN b7 SCALE)

1. Scale: Lydian b7.
2. Pent/blues: [down] min 3rd
3. Arpeggios: Min7b5 [up] 3rd, Min(maj 7) [up] 5th, Maj7#5 [down] whole step.
(All diatonic arps of related melodic minor scale).
4. Triads: from root and [up] whole step
5. Intervals: 3rds and 6ths

MY FAVORITES:

1. Lydian b7 scale
2. Minor pent/blues [down] min3rd
3. Maj7#5 arp [down] whole step
4. Major triad [up] whole step
5. 3rds.

Ex. 98

Chord Progressions

Bb maj7/C	%	Bb maj7#5/C	%
Bb mixolydian		Bb lydian b7	

Ex. 99

Bb/C	Db/Eb	F/G
4	4	4
C mixolydian	Eb mixolydian	G mixolydian

Ex. 100

C 9	%	Eb 13	%
C lydian b7		Eb lydian b7	
A 13	%	F 13	%
A lydian b7		F lydian b7	

Ex. 101

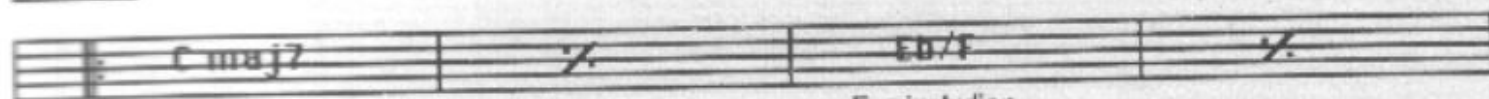
C 9	F 9	C 9	%
C lydian b7	F lydian b7	C lydian b7	
F 9	%	C 9	%
F lydian b7		C lydian b7	

Ex. 102

D/E	%	C 9	%
E mixolydian		C lydian b7	
Eb/F	%	Eb 9b5	%
F mixolydian		Eb lydian b7	
Bb/Eb	%	B 13	%
Eb mixolydian		B lydian b7	

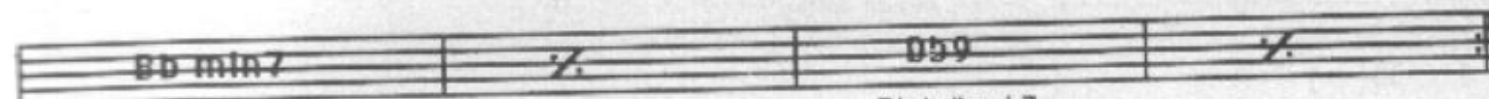
Ex. 103

COMBINATION PROGRESSIONS



C major

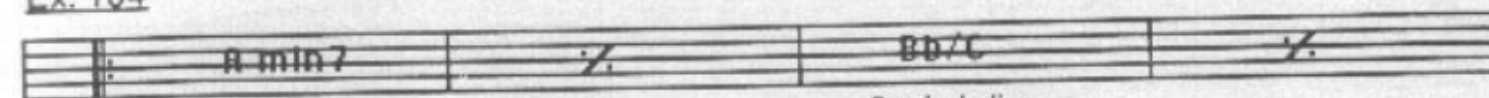
F mixolydian



Bb dorian

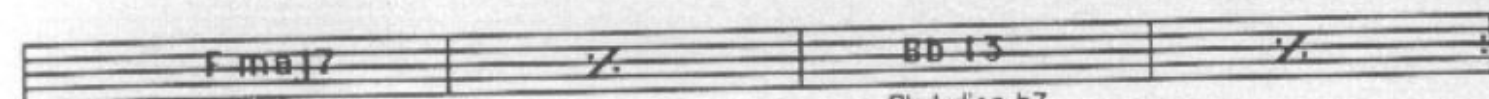
Db lydian b7

Ex. 104



A dorian

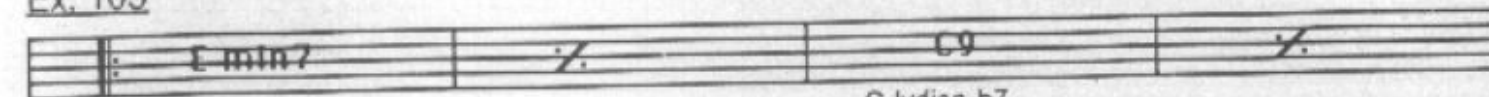
C mixolydian



F major

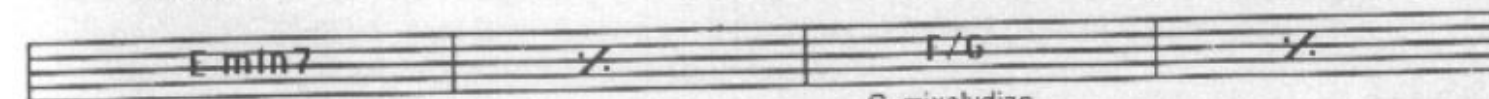
Bb lydian b7

Ex. 105



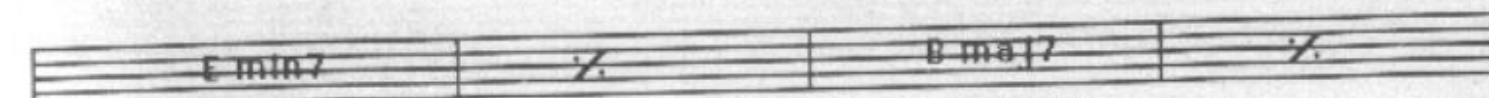
E dorian

C lydian b7



E dorian

G mixolydian



E dorian

B major/B lydian

Ex. 106

"Playing My Dx - 9 Trillion" (based on Ex. 98)

Bbmaj7/C

Bbmaj7#5/C

F triad

C mixolydian

D triad

Bbmaj7/C

F triad

C triad

D minor triad

Bb triad

Bbmaj7#5/C

D triad

D major 7#5 arpeggio

Ex. 107

"Fried Zucchini" (based on Ex. 104)

Amin7

Bb/C

A dorian 3rds

C mixolydian 3rds

Fmaj7

Bb13

3rds in F major

4ths & 3rds in F

3rd in Bb lydian b7

CHAPTER 4: ALTERED DOMINANT CHORDS

There are three main scale approaches for altered dominants: Super Locrian (7th mode of Melodic Minor), Diminished (half whole from root), and Phrygian Major (5th mode of Harmonic Minor).

Melodic minor will be the final topic for this book. The Frank Gambale Technique Book II will continue where this book leaves off.

CHORD TYPE: Altered Dominant

APPROACH: Super Locrian (Melodic Minor) Scale

The most common scale used over altered dominant chords is the SUPER LOCRIAN. This scale begins on the 7th degree of the melodic minor scale. An altered dominant means a 7th chord with an altered (# or b), 9 or 5 or any combination.

The chord we will use for our purposes is E7#9. The scale will be E Super Locrian which = 7th mode of F Melodic minor. F Melodic minor = F G Ab Bb C D E. E Super Locrian = E F G Ab Bb C D = 1 b2 b3 3 b5 #5 b7 (b9) (#9) (#11) (b13).

FORMULA: On altered dominant chords play Super Locrian from the root or play melodic minor [up] 1/2 step from the root of the chord.

Ex. 108

E Super Locrian (F melodic minor) over E7#9



Ex. 109 E Super Locrian

1 b2 b3 b5 #5 b7
(b9 #9 #11 b13)

	b2	b5		3	#5	b2
			①			
3	b3	#5	b2	b5	b7	b3
	3					3
5	b7	b3	#5	①		
	b5		3		b2	5
7	①		b7			
	#5	b2	b5		b3	#5
9			①	3		
	b7	b3	#5	b2		b7
	3			b5		
12	①		b7	b3		①
	b2	b5		3	#5	b2
			①			
15	b3	#5	b2	b5	b7	b3
	3					3
17	b7	b3	#5	①		
	b5		3		b2	b5

CHORD TYPE: Altered Dominant

APPROACH: Super Locrian Pentatonics/Blues

There is one minor pentatonic in melodic minor starting on the 2nd degree. E7#9 = E Super Locrian = F Melodic Minor. 2nd degree of F Melodic Minor is G.

FORMULA: Minor pentatonic [up] min 3rd from altered dominant.

Let's listen to G minor pentatonic over E7#9 (Ex. 110).

CHORD TYPE: Altered Dominant

APPROACH: Super Locrian Arpeggios

HARMONIZED F MELODIC MINOR. Fmin(maj7) Gmin7 Abmaj7#5 Bb7 C7 Dmin7b5 Emin7b5. All these arpeggios sound great over E7 alt.

Let's look a little closer to see which are the most closely related. Dmin7b5 = 1 b3 b5 b7 = D F Ab C. If we play this arp over E, and rearrange the notes of Dmin7b5 (D = b7 of E, F = b9 of E, Ab = 3rd of E, C = #5 of E), we get E Ab(G#) C D F = 1 3 #5 b7 b9 = E7#5b9 = (Dmin7b5/E bass).

Ex. 110

Gmin pentatonic over E7#9

Ex. 111 Dmin7 b5 arpeggio over E7#9

[illegible]

The Dmin7b5 is the most closely related chord to E7alt. Let's list all the diatonic arps of F melodic minor and see how they each affect E7#9.

Fmin(maj7) = F Ab C E = b9 3 #5 R of E
 Gmin7 = G Bb D F = #9 b5 b7 b9 of E
 Abmaj7#5 = Ab C E G = 3 #5 R #9 of E
 Bb7 = Bb D F Ab = b5 b7 b9 3 of E
 C7 = C E G Bb = #5 R #9 b5 of E
 Dmin7b5 = D F Ab C = b7 b9 3 #5 of E
 Emin7b5 = E G Bb D = R #9 b5 b7 of E

All these arpeggios affect the altered chord differently and they are all useful sounds. Let's listen to all of these.

Ex. 112 Fmin (maj7) Arpeggio over E7 #9

The first system of the musical score for 'The Rose Tree' consists of two staves. The upper staff is in treble clef and contains a melody with a key signature of one flat (B-flat). The melody begins with a quarter note G4, followed by eighth notes A4, Bb4, and C5, then a quarter note D5, and continues with a series of eighth notes: E5, F5, G5, A5, Bb5, C6, D6, and E6. The lower staff is in bass clef and contains a bass line with the following sequence of notes: G2, A2, Bb2, C3, D3, E3, F3, G3, A3, Bb3, C4, D4, E4, F4, G4, A4, Bb4, C5, D5, E5, F5, G5, A5, Bb5, C6, D6, E6, F6, G6, A6, Bb6, C7, D7, E7, F7, G7, A7, Bb7, C8, D8, E8, F8, G8, A8, Bb8, C9, D9, E9, F9, G9, A9, Bb9, C10, D10, E10, F10, G10, A10, Bb10, C11, D11, E11, F11, G11, A11, Bb11, C12, D12, E12, F12, G12, A12, Bb12, C13, D13, E13, F13, G13, A13, Bb13, C14, D14, E14, F14, G14, A14, Bb14, C15, D15, E15, F15, G15, A15, Bb15, C16, D16, E16, F16, G16, A16, Bb16, C17, D17, E17, F17, G17, A17, Bb17, C18, D18, E18, F18, G18, A18, Bb18, C19, D19, E19, F19, G19, A19, Bb19, C20, D20, E20, F20, G20, A20, Bb20, C21, D21, E21, F21, G21, A21, Bb21, C22, D22, E22, F22, G22, A22, Bb22, C23, D23, E23, F23, G23, A23, Bb23, C24, D24, E24, F24, G24, A24, Bb24, C25, D25, E25, F25, G25, A25, Bb25, C26, D26, E26, F26, G26, A26, Bb26, C27, D27, E27, F27, G27, A27, Bb27, C28, D28, E28, F28, G28, A28, Bb28, C29, D29, E29, F29, G29, A29, Bb29, C30, D30, E30, F30, G30, A30, Bb30, C31, D31, E31, F31, G31, A31, Bb31, C32, D32, E32, F32, G32, A32, Bb32, C33, D33, E33, F33, G33, A33, Bb33, C34, D34, E34, F34, G34, A34, Bb34, C35, D35, E35, F35, G35, A35, Bb35, C36, D36, E36, F36, G36, A36, Bb36, C37, D37, E37, F37, G37, A37, Bb37, C38, D38, E38, F38, G38, A38, Bb38, C39, D39, E39, F39, G39, A39, Bb39, C40, D40, E40, F40, G40, A40, Bb40, C41, D41, E41, F41, G41, A41, Bb41, C42, D42, E42, F42, G42, A42, Bb42, C43, D43, E43, F43, G43, A43, Bb43, C44, D44, E44, F44, G44, A44, Bb44, C45, D45, E45, F45, G45, A45, Bb45, C46, D46, E46, F46, G46, A46, Bb46, C47, D47, E47, F47, G47, A47, Bb47, C48, D48, E48, F48, G48, A48, Bb48, C49, D49, E49, F49, G49, A49, Bb49, C50, D50, E50, F50, G50, A50, Bb50, C51, D51, E51, F51, G51, A51, Bb51, C52, D52, E52, F52, G52, A52, Bb52, C53, D53, E53, F53, G53, A53, Bb53, C54, D54, E54, F54, G54, A54, Bb54, C55, D55, E55, F55, G55, A55, Bb55, C56, D56, E56, F56, G56, A56, Bb56, C57, D57, E57, F57, G57, A57, Bb57, C58, D58, E58, F58, G58, A58, Bb58, C59, D59, E59, F59, G59, A59, Bb59, C60, D60, E60, F60, G60, A60, Bb60, C61, D61, E61, F61, G61, A61, Bb61, C62, D62, E62, F62, G62, A62, Bb62, C63, D63, E63, F63, G63, A63, Bb63, C64, D64, E64, F64, G64, A64, Bb64, C65, D65, E65, F65, G65, A65, Bb65, C66, D66, E66, F66, G66, A66, Bb66, C67, D67, E67, F67, G67, A67, Bb67, C68, D68, E68, F68, G68, A68, Bb68, C69, D69, E69, F69, G69, A69, Bb69, C70, D70, E70, F70, G70, A70, Bb70, C71, D71, E71, F71, G71, A71, Bb71, C72, D72, E72, F72, G72, A72, Bb72, C73, D73, E73, F73, G73, A73, Bb73, C74, D74, E74, F74, G74, A74, Bb74, C75, D75, E75, F75, G75, A75, Bb75, C76, D76, E76, F76, G76, A76, Bb76, C77, D77, E77, F77, G77, A77, Bb77, C78, D78, E78, F78, G78, A78, Bb78, C79, D79, E79, F79, G79, A79, Bb79, C80, D80, E80, F80, G80, A80, Bb80, C81, D81, E81, F81, G81, A81, Bb81, C82, D82, E82, F82, G82, A82, Bb82, C83, D83, E83, F83, G83, A83, Bb83, C84, D84, E84, F84, G84, A84, Bb84, C85, D85, E85, F85, G85, A85, Bb85, C86, D86, E86, F86, G86, A86, Bb86, C87, D87, E87, F87, G87, A87, Bb87, C88, D88, E88, F88, G88, A88, Bb88, C89, D89, E89, F89, G89, A89, Bb89, C90, D90, E90, F90, G90, A90, Bb90, C91, D91, E91, F91, G91, A91, Bb91, C92, D92, E92, F92, G92, A92, Bb92, C93, D93, E93, F93, G93, A93, Bb93, C94, D94, E94, F94, G94, A94, Bb94, C95, D95, E95, F95, G95, A95, Bb95, C96, D96, E96, F96, G96, A96, Bb96, C97, D97, E97, F97, G97, A97, Bb97, C98, D98, E98, F98, G98, A98, Bb98, C99, D99, E99, F99, G99, A99, Bb99, C100, D100, E100, F100, G100, A100, Bb100, C101, D101, E101, F101, G101, A101, Bb101, C102, D102, E102, F102, G102, A102, Bb102, C103, D103, E103, F103, G103, A103, Bb103, C104, D104, E104, F104, G104, A104, Bb104, C105, D105, E105, F105, G105, A105, Bb105, C106, D106, E106, F106, G106, A106, Bb106, C107, D107, E107, F107, G107, A107, Bb107, C108, D108, E108, F108, G108, A108, Bb108, C109, D109, E109, F109, G109, A109, Bb109, C110, D110, E110, F110, G110, A110, Bb110, C111, D111, E111, F111, G111, A111, Bb111, C112, D112, E112, F112, G112, A112, Bb112, C113, D113, E113, F113, G113, A113, Bb113, C114, D114, E114, F114, G114, A114, Bb114, C115, D115, E115, F115, G115, A115, Bb115, C116, D116, E116, F116, G116, A116, Bb116, C117, D117, E117, F117, G117, A117, Bb117, C118, D118, E118, F118, G118, A118, Bb118, C119, D119, E119, F119, G119, A119, Bb119, C120, D120, E120, F120, G120, A120, Bb120, C121, D121, E121, F121, G121, A121, Bb121, C122, D122, E122, F122, G122, A122, Bb122, C123, D123, E123, F123, G123, A123, Bb123, C124, D124, E124, F124, G124, A124, Bb124, C125, D125, E125, F125, G125, A125, Bb125, C126, D126, E126, F126, G126, A126, Bb126, C127, D127, E127, F127, G127, A127, Bb127, C128, D128, E128, F128, G128, A128, Bb128, C129, D129, E129, F129, G129, A129, Bb129, C130, D130, E130, F130, G130, A130, Bb130, C131, D131, E131, F131, G131, A131, Bb131, C132, D132, E132, F132,

Ex. 113

Gmin7 arpeggio over E7#9

8 Va Loco

Ex. 114

Abmaj7#5 arpeggio over E7#9

Ex. 115

Bb7 arpeggio over E7#9

Ex. 116

C7 arpeggio over E7#9

Ex. 117

Emin7b5 arpeggio over E7#9

CHORD TYPE: Altered Dominant

APPROACH: Super Locrian Triads

In a melodic minor scale there are two major triads. They appear on the 4th and 5th degrees.

E7#9 = F melodic minor. 4th and 5th degrees of F are Bb and C.

FORMULA: Major triads [up] b5 and [up] #5 from the root of the altered chord.

Let's listen to Bb and C major triads over E7#9.

Ex. 118

Bb triads over E7#9 chord

Ex. 119

Cmaj triads over E7#9 chord

Ex. 120 Diatonic Triads from E Super Locrian over E7#9 chord

Triads: Eo | F min | G min | Ab aug | Bb | C | Do | Eo

Fret numbers (Bass line): 7 5 8 10 6 8 10 8 7 9 10 11 | 8 7 10 12 9 10 12 10 9 11 12 4 | 9

CHORD TYPE: Altered Dominant
APPROACH: Super Locrian Intervals

3rds and 6ths. Let's listen.

Ex. 121 Diatonic 3rds from E Super Locrian over E7#9 chord.

3rds: E-F | F-G | G-A | A-B | B-C | C-Do | Do-E | E-F

Fret numbers (Bass line): 7 5 6 8 6 8 5 6 8 7 5 5 7 6 8 9 | 6 7 6 8 9 8 10 11 9 8 6 8 6 7 8 9 | 9

Ex. 122 Diatonic 6ths from E Super Locrian over E7#9

6ths: E-B | F-C | G-D | A-E | B-F | C-G | D-A | E-B

Fret numbers (Bass line): 7 5 8 7 5 6 6 8 8 5 4 7 6 9 8 8 | 7 5 8 7 5 6 6 8 8 5 4 7 6 9 8 8 | 8

SUMMARY:
OF ALTERED DOMINANT

1. Scale: Super Locrian
2. Pent/ blues: [up] min 3rd
3. Arpeggios: Min7b5 [down] whole step (all diatonic arps)
4. Maj triads: [up] b5 and [up] #5
5. Intervals: 3rds and 6ths

MY FAVORITES:

1. Super Locrian scale
2. Min pent/blues [up] min 3rd
3. Maj 7#5 arpeggio [up] 3rd
4. Maj triad [up] #5
5. 3rds

Ex. 123 Progressions

A dorian		E super locrian	

Ex. 124

A dorian		D lydian b7	

F lydian		E super locrian	

Amin7 8 Va 3 D9 Loco 7

A blues 12 11 10 8 10 8

3rd from E triad | A min tri | 9 12 9 10 9 10

The first system of guitar notation consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one flat (Bb). The first measure is a whole rest in the treble and a whole note Bb in the bass, labeled 'Amin7'. The second measure has a whole rest in the treble and a whole note Bb in the bass, with a '3' above the bass staff and a bracketed 'A blues' scale (12 11 10 8 10 8) below it. The third measure has a whole rest in the treble and a whole note Bb in the bass, labeled 'D9'. The fourth measure has a whole rest in the treble and a whole note Bb in the bass, labeled 'Loco 7'. The fifth measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed '3rd from E triad | A min tri |' (9 12 9 10 9 10) below it.

Fmaj7 E7#9

G triad | G triad | Bb triad | C7 arp | 15 12 13 11

The second system of guitar notation consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one flat (Bb). The first measure is a whole rest in the treble and a whole note Bb in the bass, labeled 'Fmaj7'. The second measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed 'G triad' below it. The third measure has a whole rest in the treble and a whole note Bb in the bass, labeled 'E7#9'. The fourth measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed 'G triad | Bb triad | C7 arp |' (15 12 13 11) below it.

Amin7 D9

A blues 12 11 10 8 10 8 6th from D triad 10 10 | from D lyd b7 | 7 10 9 9 8 10

The third system of guitar notation consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one flat (Bb). The first measure is a whole rest in the treble and a whole note Bb in the bass, labeled 'Amin7'. The second measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed 'A blues' scale (12 11 10 8 10 8) below it. The third measure has a whole rest in the treble and a whole note Bb in the bass, labeled 'D9'. The fourth measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed '6th from D triad | from D lyd b7 |' (7 10 9 9 8 10) below it.

Fmaj7

A blues scale 10 9 8 10 8 11 10 8 10 8 12 14 13 11 12 15

The fourth system of guitar notation consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one flat (Bb). The first measure is a whole rest in the treble and a whole note Bb in the bass, labeled 'Fmaj7'. The second measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed 'A blues scale' (10 9 8 10 8 11 10 8 10 8) below it. The third measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed '12 14 13 11 12 15' below it.

E7#9

Based on F melodic min scale 15 15 14 13 11 12 13 13 11 12 14 15 12

The fifth system of guitar notation consists of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The key signature has one flat (Bb). The first measure is a whole rest in the treble and a whole note Bb in the bass, labeled 'E7#9'. The second measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed 'Based on F melodic min scale' (15 15 14 13 11) below it. The third measure has a whole rest in the treble and a whole note Bb in the bass, with a bracketed '12 13 13 11 12 14 15 12' below it.

EDITOR'S NOTE: On the accompanying cassette, Frank indicates that the Tech Book II will include sections on slash chords and modes. Though Frank had originally intended to include these topics, he later decided to save them for future projects. The Tech Book II is now on sale and details the second half of Frank's soloing theory course.

APPENDIX

Terminology used in this book.

INTERVALS

I refer to intervals by numbers in this manner:

- 1 = the root of a scale or chord
- b2 = minor 2nd interval (half step)
- 2 = major 2nd (whole step)
- b3 = minor third
- 3 = major third
- 4 = perfect fourth
- #4 = augmented fourth
- b5 = diminished fifth
- 5 = perfect 5th
- b6 = minor 6th
- 6 = major 6th
- b7 = minor 7th
- 7 = major 7th
- b9 = minor ninth (same note as b2, up an octave)
- 9 = major ninth (same note as 2, up an octave)
- #9 = augmented ninth (same note as b3, up an octave)
- 11 = perfect eleventh (same note as 4, up an octave)
- #11 = augmented eleventh (same note as #4, up an octave)
- b13 = minor thirteenth (same note as b6, up an octave)
- 13 = major thirteenth (same note as 6, up an octave)








It is very important to be aware of enharmonic equivalents (different spellings of the same note). For example, G# = Ab, D# = Eb, etc. Also in intervals: #4 = b5, #5 = b6, etc. And also in octave equivalents: 2 = 9 (e.g. the 2 of a C scale is D. The 9 of a C9 chord is D.) b2 = b9, b3 = #2 = #9, 4 = 11, b5 = #4 = #11, 6 = 13, #5 = b6 = b13.

OTHER NOTATION

I use the notation [up] and [down] for "up a" and "down a", respectively. So, "mel min [up] 1/2" means play the melodic minor scale up a half step (from the chord being discussed).

THE MAJOR SCALE

All major scales are made up of these intervals from the root. (W means whole step, 1/2 means half step):

from root 1  2  3  4  5  6  7  1

So in the key of Cmajor =

1	2	3	4	5	6	7	1
C	D	E	F	G	A	B	C
	W	W	1/2	W	W	W	1/2

You'll notice that the major scales other than C require the use of sharps or flats to maintain the right interval relationships. For example, the A major scale:

1	2	3	4	5	6	7	1
A	B	C#	D	E	F#	G#	A
	W	W	1/2	W	W	W	1/2

THE HARMONIZED MAJOR SCALE

There are many chords that can be constructed from the major scale. Let me show you how we arrive at them.

The notes of the C major scale are:

1	2	3	4	5	6	7	1	2	3	4	5	6
C	D	E	F	G	A	B	C	D	E	F	G	A
							8	9	10	11	12	13

Chords are made up basically in ascending diatonic 3rds, every other note of the scale. (DIATONIC means using only the notes of the given scale. So when referring to diatonic 3rds, some will turn out to be major 3rds and others will be minor 3rds.)

If you start on the 1st degree (root) of the scale, C, and build a 4-part chord by selecting every other note. . .

C D E F G A B

you have C E G B, = Cmaj7 = the I (one) chord in C.

If you begin on the 2nd degree, D, and build a 4-part chord by selecting every other note . . .

C D E F G A B C

You get D F A C = Dmin7 = the II Chord in C. E G B D = Emin7 = III in C, and so on. The list of four-part chords arrived at in this manner is the Harmonized C Major Scale.

Harmonized C major scale:

Cmaj7	Dmin7	Emin7	Fmaj7	G7	Amin7	Bmin7(b5)
I	II	III	IV	V	VI	VII

Harmonized A major scale:

Amaj7	Bmin7	C#min7	Dmaj7	E7	F#min7	G#min7(b5)
I	II	III	IV	V	VI	VII

Notice that since all major scales are constructed of the same intervals, 1 2 3 4 5 6 7 from root, the chord types on each degree remain the same in all major keys.

TRIADS: in all major keys,

the I, IV and V triads are major (1 3 5 from root of triad)

the II, III and VI triads are minor (1 b3 5)

the VII triad is diminished (1 b3 b5)

FOUR-PART CHORDS: In all major keys,

the I and IV chords are maj7 (1 3 5 7)

the II, III and VI chords are min7 (1 b3 5 b7)

the V chord is dominant (1 3 5 b7)

the VII chord is min7(b5) (1 b3 b5 b7)

Although I generally write down just the 4-part chords when listing the harmonized scale, it is very important to keep in mind what the diatonic extensions (continuing up in diatonic 3rds to the 9 or b9 or #9, 11 or #11, 13 or b13) would be.

For example, the IV chord in C would be:

C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D
			1	2	3	#4	5	6	7		9		#11		13
			1	3	5										
			from F = F triad												
			1	3	5	7									
			from F = Fmaj7												
			1	3	5	7	9								
			from F = Fmaj9												
			1	3	5	7	9	#11							
			from F = Fmaj9(#11)												
			1	3	5	7	9	#11	13						
			from F = Fmaj13(#11)												

Notice that 9 of F = the same note as 2 of F, #11 = #4, 13 = 6. The diatonic extensions available on each scale degree also remain the same in every major key.

In all major keys:

I maj7 (9 11 13)

II min7 (9 11 13)

III min7 (b9 11 b13)

IV maj7 (9 #11 13)

V 7 (9 11 13)

VI min7 (9 11 b13)

VII min7 (b5) (b9 11 b13)

MODES OF THE MAJOR SCALE

In all music theory, the major scale is always used as a reference to determine another scale's interval structure. Modes of major can be compared to major in two ways: as alterations of a major scale (taking a major scale and raising or lowering certain notes by 1/2 steps) or as inversions of a major scale (taking a major scale and playing a 7-note scale by starting on a degree other than 1 of the major scale). I want you to be aware of both ways. We'll use C as a root for our examples of modes.

DORIAN as an inversion: DORIAN IS MODE II OF MAJOR.

Example: In C Dorian, C is 2 of Bb, so

The image shows two musical staves. The first staff is labeled 'Bb Major' and contains the notes Bb, C, D, Eb, F, G, Ab, Bb. Below the notes are the numbers 1, 2, 3, 4, 5, 6, 7, 1. The second staff is labeled 'C Dorian' and contains the notes C, D, Eb, F, G, Ab, Bb, C. Below the notes are the numbers 1, 2, b3, 4, 5, 6, b7, 9.

C Dorian is mode II of Bb major, (has the same notes as Bb major, starting on 2).

As an alteration of C major

The image shows two musical staves. The first staff is labeled 'C Major' and contains the notes C, D, E, F, G, A, B, C. Below the notes are the numbers 1, 2, 3, 4, 5, 6, 7. The second staff is labeled 'C Dorian' and contains the notes C, D, Eb, E, F, G, Ab, Bb, C. Below the notes are the numbers 1, 2, b3, 4, 5, 6, b7, 9, 11, 13.

Dorian is like a major scale with b3, b7.

PHRYGIAN IS MODE III OF MAJOR.

Example: In C Phrygian, C is 3 or Ab, so

The image shows two musical staves. The first staff is labeled 'Ab Major' and contains the notes Ab, Bb, C, Db, Eb, F, G, Ab. Below the notes are the numbers 1, 2, 3, 4, 5, 6, 7, 1, 2. The second staff is labeled 'C Phrygian' and contains the notes C, Db, Eb, F, G, Ab, Bb, C. Below the notes are the numbers 1, b2, b3, 4, 5, b6, b7, b9, 11, b13.

C Phrygian is mode III of Ab major.

Compared to major of the same root:

The image shows two musical staves. The first staff is labeled 'C Major' and contains the notes C, D, E, F, G, A, B, C. Below the notes are the numbers 1, 2, 3, 4, 5, 6, 7. The second staff is labeled 'C Phrygian' and contains the notes C, Db, Eb, F, G, Ab, Bb, C. Below the notes are the numbers 1, b2, b3, 4, 5, b6, b7, b9, 11, b13.

Phrygian is like a major scale with b2, b3, b6, b7.

LYDIAN IS MODE IV OF MAJOR

Example: C Lydian. C is 4 of G, so

Diagram showing the G Major scale (1 2 3 4 5 6 7 1 2 3) and the C Lydian scale (1 2 3 #4 5 6 7).

Lydian is mode IV of G major.

Compared to major of the same root:

Diagram showing the C Major scale (1 2 3 4 5 6 7) and the C Lydian scale (1 2 3 #4 5 6 7, 9 #11 13).

Lydian is like a major scale with a #4.

MIXOLYDIAN IS MODE V OF MAJOR

Example: C Mixolydian. C is 5 of F, so

Diagram showing the F Major scale (1 2 3 4 5 6 7 1 2 3 4) and the C Mixolydian scale (1 2 3 4 5 6 b7).

C Mixolydian is mode V of F major.

Compared to major of the same root:

Diagram showing the C Major scale (1 2 3 4 5 6 7) and the C Mixolydian scale (1 2 3 4 5 6 b7, 9 11 13).

Mixolydian is like a major scale with b7.

AEOLIAN (also known as natural minor) IS MODE VI OF MAJOR.

Example: C Aeolian. C is 6 of Eb, so

Diagram showing the Eb Major scale (1 2 3 4 5 6 7 1 2 3 4 5) and the C Aeolian scale (1 2 b3 4 5 b6 b7).

C Aeolian is mode VI of Eb major.

Compared to major of the same root:

Diagram showing the C Major scale (1 2 3 4 5 6 7) and the C Aeolian scale (1 2 b3 4 5 b6 b7, 9 11 b13).

Aeolian is like a major with b3, b6, b7.

LOCRIAN IS MODE VII OF MAJOR

Example: C Locrian. C is 7 of Db, so

The image shows two musical staves. The first staff is labeled 'Db Major' and contains the notes of the Db major scale: Db, Eb, F, Gb, Ab, Bb, C. The second staff is labeled 'C Locrian' and contains the notes of the C Locrian scale: C, Db, Eb, F, Gb, Ab, Bb. Below the first staff, the scale degrees are numbered 1 through 7, and below the second staff, they are numbered 1 through 6.

C Locrian is mode VII of Db major.

Compared to major of the same root:

The image shows two musical staves. The first staff is labeled 'C Major' and contains the notes of the C major scale: C, D, E, F, G, A, B. The second staff is labeled 'C Locrian' and contains the notes of the C Locrian scale: C, Db, Eb, F, Gb, Ab, Bb. Below the first staff, the scale degrees are numbered 1 through 7. Below the second staff, the scale degrees are numbered 1 through 7, with the second, third, fifth, sixth, and seventh degrees marked with flats (b2, b3, b5, b6, b7).

Locrian is like a major scale with b2, b3, b5, b6, b7

SUMMARY OF THE MODES OF MAJOR

(mode I = major) = 1 2 3 4 5 6 7

mode II = Dorian = 1 2 b3 4 5 6 b7

mode III = Phrygian = 1 b2 b3 4 5 b6 b7

mode IV = Lydian = 1 2 3 #4 5 6 7

mode V = Mixolydian = 1 2 3 4 5 6 b7

mode VI = Aeolian = natural minor = 1 2 b3 4 5 b6 b7

mode VII = Locrian = 1 b2 b3 4 b5 b6 b7

MODES - MAJOR

C Major

1 2 3 4 5 6 7
(9) (11) (13)

	4				①	4
		7	3	6		
3	5	①	4		2	5
			7			
5	6	2	5	①	3	6
				4		
7	7	3	6	2		7
	①	4			5	①
9			7	3		
	2	5	①	4	6	2
12	3	6	2	5	7	3
	4				①	4
		7	3	6		
15	5	①	4		2	5
			7			
17	6	2	5	①	3	6
				4		

C Dorian

1 2 b3 4 5 6 b7
(9) (11) (13)

	4	b7	b3		①	4
			6			
3	5	①	4	b7	2	5
				b3		
5	6	2	5	①		6
	b7	b3			4	b7
7			6	2		
	①	4	b7	b3	5	①
9						
	2	5	①	4	6	2
	b3				b7	b3
12		6	2	5		
	4	b7	b3		①	4
			6			
15	5	①	4	b7	2	5
				b3		
17	6	2	5	①		6
	b7	b3			4	b7

C Phrygian

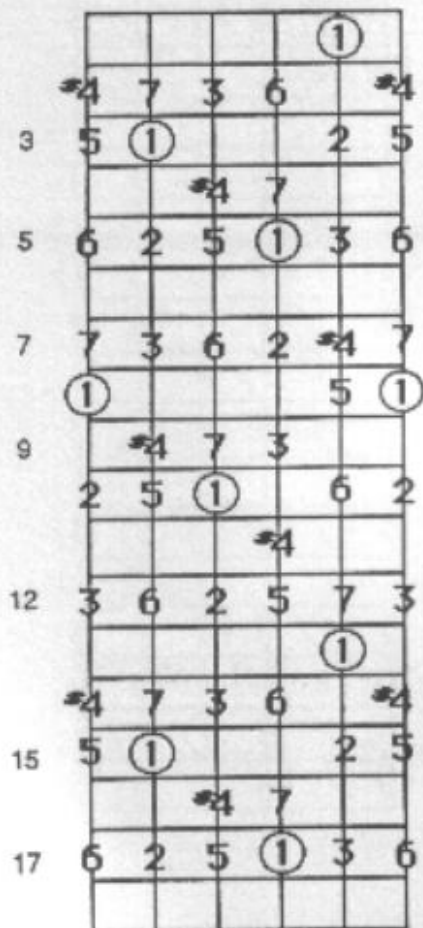
1 b2 b3 4 5 b6 b7
(b9) (11) (b13)

	4	b7	b3	b6	①	4	
				b2			
3	5	①	4	b7		5	
	b6	b2			b3	b6	
5			5	①			
	b7	b3	b6	b2	4	b7	
7							
	①	4	b7	b3	5	①	
9	b2				b6	b2	
		5	①	4			
	b3	b6	b2			b7	b3
12			5				
	4	b7	b3	b6	①	4	
				b2			
15	5	①	4	b7		5	
	b6	b2			b3	b6	
17			5	①			
	b7	b3	b6	b2	4	b7	

MODES MAJOR

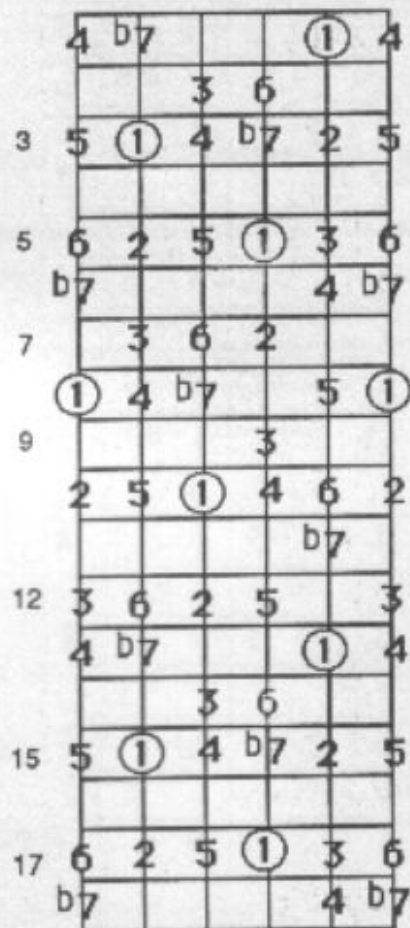
C Lydian

1 2 3 #4 5 6 7
(9) (#11) (13)



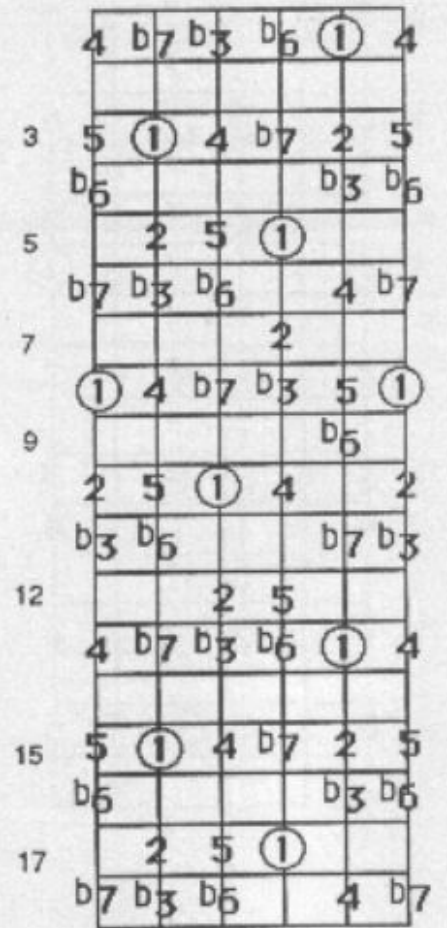
C Mixolydian

1 2 3 4 5 6 b7
(9) (11) (13)



C Aeolian

1 2 b3 4 5 b6 b7
(9) (11) (b13)



MODES MAJOR

C Locrian

1 b2 b3 4 b5 b6 b7
(b9) (11) (b13)

	4	b7	b3	b6	①	4
	b5				b2	b5
3		①	4	b7		
	b6	b2	b5		b3	b6
5				①		
	b7	b3	b6	b2	4	b7
7				b5		
	①	4	b7	b3		①
9	b2	b5			b6	b2
			①	4		
	b3	b6	b2	b5	b7	b3
12						
	4	b7	b3	b6	①	4
	b5				b2	b5
15		①	4	b7		
	b6	b2	b5		b3	b6
17				①		
	b7	b3	b6	b2	4	b7

THE MELODIC MINOR SCALE

The melodic minor scale is made up of these intervals:

from root: 1 \searrow 2 \searrow b3 \searrow 4 \searrow 5 \searrow 6 \searrow 7 \searrow 1
 from each other: W $\frac{1}{2}$ W W W W $\frac{1}{2}$

The melodic minor scale is like a major scale with a b3.
 For example, C melodic minor is C D E \flat F G A B.

THE HARMONIZED MELODIC MINOR SCALE

In all melodic minor scales, the harmonized scale is:

- I min(maj7) (9 11 13)
- II min7 (b9 11 13)
- III maj7 (#5) (9 #11 b13 [nat.]13)
- IV 7 (9 #11 13)
- V7 (9 11 b13)
- VI min7(b5) (9 11 b13)
- VII min7(b5) (b9 #9 b11 = 3 #11 b13)

For example, in A melodic minor (A B C D E F# G#), the harmonized scale is Amin(maj7)
 Bmin7 Cmaj7(#5) D7 E7 F#min7(b5) G#min7(b5)

MODES OF THE MELODIC MINOR SCALE

Just as we arrive at modes of the major scale by playing seven-note scales, we can start on different degrees and arrive at modes of the melodic minor by doing the same thing. The modes are given names which compare them to modes of the major scale. The interval structure is compared back to the major scale.

DORIAN FLAT TWO IS MODE II OF MELODIC MINOR.

Example: In C Dorian b2, C is 2 of B \flat melodic minor, so ...

The image shows two musical staves. The first staff is labeled 'B \flat Melodic Minor' and shows the scale B \flat A G F E D C B \flat A. The second staff is labeled 'C Dorian b2' and shows the scale C B \flat A G F E D C. Below the first staff, the intervals are labeled: 1 2 b3 4 5 6 7 1.

C Dorian b2 is mode II of B \flat melodic minor.

Compared to major of same root:

The image shows two musical staves. The first staff is labeled 'C Major' and shows the scale C D E F G A B C. The second staff is labeled 'C Dorian b2' and shows the scale C B \flat A G F E D C. Below the first staff, the intervals are labeled: 1 2 3 4 5 6 7. Below the second staff, the intervals are labeled: 1 b2 b3 4 5 6 b7, with b9 11 13 written below b2 b3.

Dorian Flat Two is like a major scale with b2, b3, b7.

LYDIAN SHARP FIVE IS MODE III OF MELODIC MINOR.

Example: In C Lydian #5, C is b3 of A melodic minor, so...

A Melodic Minor

1 2 b3 4 5 6 7 1 2

C Lydian #5

1 2 3 #4 #5 6 7

C Lydian #5 is mode II of A melodic minor.

Compared to major of the same root

C Major

1 2 3 4 5 6 7

C Lydian #5

1 2 3 #4 #5 6 7
9 #11 b13 13

Lydian Sharp Five is like a major scale with #4, #5.

LYDIAN FLAT SEVEN IS MODE IV OF MELODIC MINOR.

Example: In C Lydian b7, C is 4 of G melodic minor, so...

G Melodic Minor

1 2 b3 4 5 6 7 1 2 b3

C Lydian b7

1 2 3 #4 5 6 b7

C Lydian b7 is mode IV of G melodic minor.

Compared to major of the same root

C Major

1 2 3 4 5 6 7

C Lydian b7

1 2 3 #4 5 6 b7
9 #11 13

Lydian Flat Seven is like a major scale with #4, b7.

MIXOLYDIAN FLAT SIX IS MODE V OF MELODIC MINOR.

Example: In C Mixolydian b6, C is 5 of F melodic minor, so...

F Melodic Minor

1 2 b3 4 5 6 7 1 2 b3 4

C Mixolydian b6

1 2 3 4 5 b6 b7

C Mixolydian b6 is mode V of F melodic minor.

Compared to major of the same root

C Major

1 2 3 4 5 6 7

C Mixolydian b6

1 2 3 4 5 b6 b7
9 11 b13

Mixolydian Flat Six is like a major scale with b6, b7.

AEOLIAN FLAT FIVE IS MODE III OF MELODIC MINOR.

Example: In C Lydian b5, C is 6 of Eb melodic minor, so ...

The image shows two musical staves. The left staff is titled 'Eb Melodic Minor' and shows the scale: Eb, F, G, Ab, Bb, C, D, Eb. Below it are the scale degrees: 1 2 b3 4 5 6 7 1 2 b3 4 5. The right staff is titled 'C Aeolian b5' and shows the scale: C, D, Eb, F, G, Ab, Bb. Below it are the scale degrees: 1 2 b3 4 5 6 7 1 2 b3 4 5.

C Aeolian b5 is mode VI of Eb melodic minor.

Compared to major of the same root

The image shows two musical staves. The left staff is titled 'C Major' and shows the scale: C, D, E, F, G, A, B. Below it are the scale degrees: 1 2 3 4 5 6 7. The right staff is titled 'C Aeolian b5' and shows the scale: C, D, Eb, F, G, Ab, Bb. Below it are the scale degrees: 1 2 b3 4 b5 b6 b7, with additional labels 9, 11, and b13 below the notes.

Aeolian Flat Five is like a major scale with b3, b5, b6, b7.

SUPER LOCRIAN IS MODE VII OF MELODIC MINOR.

Example: In C Super Locrian, C is 7 of Db melodic minor, so ...

The image shows two musical staves. The left staff is titled 'Db Melodic Minor' and shows the scale: Db, Eb, F, G, Ab, Bb, C, Db. Below it are the scale degrees: 1 2 b3 4 5 6 7 1 2 b3 4 5 6. The right staff is titled 'C Super Locrian' and shows the scale: C, Db, Eb, F, G, Ab, Bb. Below it are the scale degrees: 1 2 b3 4 5 6 7 1 2 b3 4 5 6.

C Super Locrian is mode VII of Db melodic minor.

Compared to major of the same root

The image shows two musical staves. The left staff is titled 'C Major' and shows the scale: C, D, E, F, G, A, B. Below it are the scale degrees: 1 2 3 4 5 6 7. The right staff is titled 'C Super Locrian' and shows the scale: C, Db, Eb, F, G, Ab, Bb. Below it are the scale degrees: 1 b2 b3 b4 b5 b6 b7, with additional labels b9 #9 and #11 b13 below the notes.

Super Locrian is like a major scale with b2, b3, b4, b5, b6, b7.

SUMMARY OF THE MODES OF MELODIC MINOR

- (mode I = melodic minor) = 1 2 b3 4 5 6 7
- mode II = Dorian b2 = 1 b2 b3 4 5 6 b7
- mode III = Lydian #5 = 1 2 3 #4 #5 6 7
- mode IV = Lydian b7 = 1 2 3 #4 5 6 b7
- mode V = Mixolydian b6 = 1 2 3 4 5 b6 b7
- mode VI = Aeolian b5 = 1 2 b3 4 b5 b6 b7
- mode VII = Super Locrian = 1 b2 b3 b4 b5 b6 b7

MELODIC MINOR MODES

C MELODIC MINOR

	4		b3		①	4
		7		6		
3	5	①	4		2	5
				7	b3	
5	6	2	5	①		6
		b3			4	
7	7		6	2		7
	①	4		b3	5	①
9			7			
	2	5	①	4	6	2
	b3					b3
12		6	2	5	7	
	4		b3		①	4
		7		6		
15	5	①	4		2	5
				7	b3	
17	6	2	5	①		6
		b3			4	

C DORIAN b2

	4	b7	b3		①	4
				6	b2	
3	5	①	4	b7		5
		b2			b3	
5	6		5	①		6
	b7	b3		b2	4	b7
7			6			
	①	4	b7	b3	5	①
9	b2					b2
	5	①	4	6		
	b3		b2		b7	b3
12		6		5		
	4	b7	b3		①	4
				6	b2	
15	5	①	4	b7		5
		b2			b3	
17	6		5	①		6
	b7	b3		b2	4	b7

C LYDIAN #5

			#5	①		
	#4	7	3	6		#4
3		①			2	
	#5		#4	7		#5
5	6	2		①	3	6
		#5				
7	7	3	6	2	#4	7
	①					①
9		#4	7	3	#5	
	2		①		6	2
	#5		#4			
12	3	6	2		7	3
			#5	①		
	#4	7	3	6		#4
15		①			2	
	#5		#4	7		#5
17	6	2		①	3	6
		#5				

MELODIC MINOR MODES

C LYDIAN b7

	b7			①	
*4		3	6		*4
3	5	①	b7	2	5
		*4			
5	6	2	5	①	3
b7					b7
7		3	6	2	*4
	①	b7		5	①
9		*4		3	
	2	5	①		6
			*4	b7	
12	3	6	2	5	3
	b7			①	
*4		3	6		*4
15	5	①	b7	2	5
		*4			
17	6	2	5	①	3
b7					b7

C MIXOLYDIAN b6

	4	b7		b6	①	4
			3			
3	5	①	4	b7	2	5
	b6					b6
5		2	5	①	3	
	b7		b6		4	b7
7		3		2		
	①	4	b7		5	①
9				3	b6	
	2	5	①	4		2
		b6			b7	
12	3		2	5		3
	4	b7		b6	①	4
			3			
15	5	①	4	b7	2	5
	b6					b6
17		2	5	①	3	
	b7		b6		4	b7

C AEOLIAN b5

	4	b7	b3	b6	①	4
	b5					
3		①	4	b7	2	5
	b6		b5		b3	b6
5		2		①		
	b7	b3	b6		4	b7
7				2	b5	
	①	4	b7	b3		①
9		b5			b6	
	2		①	4		2
	b3	b6		b5	b7	b3
12			2			
	4	b7	b3	b6	①	4
	b5					b5
15		①	4	b7	2	
	b6		b5		b3	b6
17		2		①		
	b7	b3	b6		4	b7

MELODIC MINOR MODES

C SUPER LOCRIAN

	b7	b3	#5	①
	b5		3	b2 b5
3	①		b7	
	#5 b2 b5		b3 #5	
5			① 3	
	b7 b3 #5 b2		b7	
7		3		b5
	①	b7 b3		①
9	b2 b5		3 #5 b2	
		①		
	b3 #5 b2 b5 b7 b3			
12	3			3
	b7 b3 #5		①	
	b5		3	b2 b5
15	①		b7	
	#5 b2 b5		b3 #5	
17			① 3	
	b7 b3 #5 b2		b7	

PENTATONIC SCALES

The minor pentatonic scale is a five note scale made up of the intervals 1 b3 4 5 b7 (from the root of the minor pentatonic scale). For example, A^{min} pent = A C D E G.

In the key of C major, C D E F G A B C D E F G etc. ... you can extract minor pentatonic scales starting on II (D), III (E), and VI (A).

In C: II min pent = D F G A C
III min pent = E G A B D
VI min pent = A C D E G

It is true of every major scale that minor pentatonics can be extracted from II, III and VI (the same degrees that produce minor 7 chords, if you remember from the section on the harmonized major scale).

The major pentatonic scale is a five-note scale made up of the intervals 1 2 3 5 6. e.g., C^{maj} pent = C D E G A.

In the key of C major, you can extract major pentatonics starting on I (C), IV (F), and V (G).

In C: I maj pent = C D E G A
IV maj pent = F G A C D
V maj pent = G A B D E

It is true of every major scale that you can extract major pentatonics from I, IV and V (the same degrees that produce major triads).

Notice that the major and minor pentatonics are inversions of each other (contain the same notes).

In C: I maj pent = C D E G A = same notes as VI minor pent = A C D E G
IV maj pent = F G A C D = II minor pent = D F G A C
V maj pent = G A B D E = III minor pent = E G A B D

BLUES SCALES

The minor blues scales are six-note scales: the same notes as minor pentatonics, with the addition of b5. The intervals are 1 b3 4 b5 [nat.]5 b7.

In C: II minor blues = D F G Ab A[nat.] C
 III minor blues = E G A Bb B[nat.] D
 VI minor blues = A C D Eb E[nat.] G

Even though the b5's of the minor blues scales are not in the major scale (for example, C major does not contain Ab, Bb or Eb), the blues scale is such a strong sound that your ear will accept the extra note with no problem, adding spice to the regular pentatonic sound. So any time the minor pentatonics are appropriate, the minor blues may also be used.

The major blues scales are six-note scales, the same notes as the major pentatonics, with the addition of b3. The intervals are 1 2 b3 [nat.]3 5 6.

In C: I major blues = C D Eb E[nat.] G A
 IV major blues = F G Ab A[nat.] C D
 V major blues = G A Bb B[nat.] D E

Notice that the major and minor blues are inversions of each other. (This is essentially the difference between blues and country styles).

In C: I major blues = C D Eb E[nat.] G A = VI minor blues = A C D Eb E[nat.] G
 IV major blues = F G Ab A[nat.] C D = II minor blues = D F G Ab A[nat.] C
 V major blues = G A Bb B[nat.] D E = III minor blues = E G A Bb B[nat.] D

Again, even though the b3's of the major blues are not in the major scale, your ear accepts them and so the major blues may be used any time the major pentatonics are appropriate.

Since the major pentatonics/blues scales contain the same notes as the minor pent/blues, the use of the minor is more common in contemporary pop, rock and jazz (the major pent/blues are used in country music). I refer only to the minor pent/blues in this book and leave it to you, if you want, to remember that the majors are available as well.

C MAJ PENTATONIC

				①	
		3	6		
3	5	①			2 5
5	6	2	5	①	3 6
7		3	6	2	
	①				5 ①
9			3		
	2	5	①		6 2
12	3	6	2	5	3
				①	
		3	6		
15	5	①			2 5
17	6	2	5	①	3 6

C MIN PENTATONIC

	4	b7	b3		①	4
3	5	①	4	b7		5
				b3		
5			5	①		
	b7	b3			4	b7
7						
	①	4	b7	b3	5	①
9						
	5	①	4			
	b3			b7	b3	
12			5			
	4	b7	b3		①	4
15	5	①	4	b7		5
				b3		
17			5	①		
	b7	b3			4	b7

C MIN BLUES

	4	b7	b3		①	4
	b5					b5
3	5	①	4	b7		5
		b5		b3		
5			5	①		
	b7	b3			4	b7
7				b5		
	①	4	b7	b3	5	①
9		b5				
	5	①	4			
	b3			b5	b7	b3
12			5			
	4	b7	b3		①	4
	b5					b5
15	5	①	4	b7		5
		b5		b3		
17			5	①		
	b7	b3			4	b7

C MAJ BLUES

		b3		1	
		3	6		
3	5	1			2 5
				b3	
5	6	2	5	1	3 6
	b3				
7		3	6	2	
	1			b3	5 1
9				3	
	2	5	1		6 2
	b3				b3
12	3	6	2	5	3
		b3		1	
			3	6	
15	5	1			2 5
				b3	
17	6	2	5	1	3 6
	b3				

FRANK GAMBALE

THE FRANK GAMBALE TECHNIQUE

BOOK 1

Frank Gambale is one of the most distinctive guitar players on the scene. He sounds like a happy hybrid of a jazz player's love of harmonic lines, a metal player's love of arpeggios and a full singing legato tone, as if George Benson, Malmsteen and Holdsworth collaborated on a single solo. His speed/sweep-picking technique is already legendary, so this new book is a welcome instructional publication.

The Technique Book looks at the way Gambale solos over chordal harmonies. The method is structured around six basic chordal types (minor 7, maj 7, dom 7, altered dom 7, min 7 flat 5, and diminished) approached five ways: by diatonic scales (selected based on the tonality required), pentatonic/blues scales, four-note arpeggios, triads (both as notes and chordal fragments) and two-note intervals. This book is the first of two and covers the first four chordal types.

The Technique Book is a method for examining what all these possibilities sound like over a given chord. Gambale provides all the options and then tells you what his preferred sounds are in context. It ends up that what Frank plays are moving harmonic progressions superimposed over more or less static chords or vamps. The melodically phrased progressions selected give his solo lines harmonic interest and internally generated movement (in contrast to the usually single modal approach used by the average rock player).

The Book is an exposé of how to use rather simple musical materials to create sophisticated solos by combining them in specific ways. Without burdening the player with overly theoretical jargon, Gambale shows how to play harmonic extensions to basic chordal sounds that end up sounding rather "hip." Jazz players have been using these techniques for decades and this book explains them to the guitar player. A short and pithy appendix covers all the theory basics you need. If you follow the fingering notation you will gain insight into Gambale's mastery of the fretboard.

Examples of what each scale approach sounds like are on the accompanying audio cassette. The examples are well chosen and sometimes he plays them at several tempos, even at his usual blistering rate. The tape begins and ends with some typical Gambale soloing for those who don't know why he is considered a guitar hero.

The Frank Gambale Technique Book is a valuable source of new ideas for the guitarist wishing to expand beyond the usual melodic territories.

Guitar World
May 1988

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15800 N.W. 48th Avenue • Miami, Florida 33194
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